

Chief Editor

Dr. A. Singaraj, M.A., M.Phil., Ph.D.

Managing Editor

Mrs.M.Josephin Immaculate Ruba

EDITORIAL ADVISORS

1. Prof. Dr.Said I.Shalaby, MD,Ph.D.
Professor & Vice President
Tropical Medicine,
Hepatology & Gastroenterology, NRC,
Academy of Scientific Research and Technology,
Cairo, Egypt.
2. Dr. Mussie T. Tessema,
Associate Professor,
Department of Business Administration,
Winona State University, MN,
United States of America,
3. Dr. Mengsteab Tesfayohannes,
Associate Professor,
Department of Management,
Sigmund Weis School of Business,
Susquehanna University,
Selinsgrove, PENN,
United States of America,
4. Dr. Ahmed Sebihi
Associate Professor
Islamic Culture and Social Sciences (ICSS),
Department of General Education (DGE),
Gulf Medical University (GMU),
UAE.
5. Dr. Anne Maduka,
Assistant Professor,
Department of Economics,
Anambra State University,
Igbariam Campus,
Nigeria.
6. Dr. D.K. Awasthi, M.Sc., Ph.D.
Associate Professor
Department of Chemistry,
Sri J.N.P.G. College,
Charbagh, Lucknow,
Uttar Pradesh. India
7. Dr. Tirtharaj Bhoi, M.A, Ph.D,
Assistant Professor,
School of Social Science,
University of Jammu,
Jammu, Jammu & Kashmir, India.
8. Dr. Pradeep Kumar Choudhury,
Assistant Professor,
Institute for Studies in Industrial Development,
An ICSSR Research Institute,
New Delhi- 110070, India.
9. Dr. Gyanendra Awasthi, M.Sc., Ph.D., NET
Associate Professor & HOD
Department of Biochemistry,
Dolphin (PG) Institute of Biomedical & Natural
Sciences,
Dehradun, Uttarakhand, India.
10. Dr. C. Satapathy,
Director,
Amity Humanity Foundation,
Amity Business School, Bhubaneswar,
Orissa, India.



ISSN (Online): 2455-7838

SJIF Impact Factor : 8.013

ISI I.F. Value : 1.241

DOI : 10.36713/epra2016

EPRA International Journal of Research & Development (IJRD)

Monthly Peer Reviewed & Indexed
International Online Journal

Volume: 6, Issue:5, May 2021

Indexed By:



Published By
EPRA Publishing

CC License





CONTENTS

S.NO	TITLE	AUTHOR/S	PAGES
1	EFFECT OF GLASS POWDER AND SILICA FUME IN CONCRETE –AN EXPERIMENTAL STUDY	Mrs.J.Kalaiselvi Nivedha, Ms. P.Ranjitha, Mr. K.Jeyavelu	1-5
2	INCREASING SPEECH CULTURE OF NON-LANGUAGE UNIVERSITY STUDENTS TEACHING RUSSIAN LANGUAGE	Riskulova Dilorom Shagiyazovna	6-10
3	A STUDY ON STRESS MANAGEMENT AMONG WORKING PEOPLE IN PRIVATE SECTOR DURING COVID-19 PANDEMIC WITH REFERENCE TO CBE	Shrinithi.K.M, Mr. M.A.Prasad	11-16
4	DEVELOPMENT OF VORICONAZOLE MICROSPONGE BASED TOPICAL DELIVERY FORMULATION	Kadari Supraja, Suryapally Pooja, Muddam Mahalakshmi, Bathini Yashwitha	17-31
5	IMPACT OF GREEN MARKETING AMONG PUBLIC WITH SPECIAL REFERENCE TO COIMBATORE	Praveen.V, Mr. M.A.Prasad	32-37
6	EDUCATION FOR ALL IN INDIA: HOW MUCH HAS BEEN COVERED AND HOW MUCH IS LEFT	Seema Agnihotri (Ph.D)	38-43
7	CROP YIELD PREDICTION USING MACHINE LEARNING AND CLOUD COMPUTING	Disha A	44-47
8	A STUDY ON PREDICTION IN CLOUD COMPUTING	Disha Ashwin, Gurubasava	48-50
9	ONLINE V/S TRADITIONAL PEDAGOGY IN PRESENT EDUCATION: A CRITICAL VIEW https://doi.org/10.36713/epra6938	Dr. Gaonkar Gopalakrishna M, Mr. Manjunatha M	51-57
10	A STUDY ON IMPACT OF SOCIAL MEDIA ON CONSUMERS BUYING BEHAVIOUR SPECIAL REFERENCE TO COIMBATORE CITY	S. Fashmitha, Mr.D. Shanmugavadivel	58-62
11	THE IMPACT OF INSURGENT ACTIVITIES ON GOVERNMENT SENIOR SECONDARY EDUCATION IN BORNO AND YOBE STATES	Prof. C. E. Edemenang, DR. A. Garba, DR. M. M. Mande, Danladi, Jagula Msheliza	63-70
12	A REDUCED SWITCH THIRTEEN LEVEL INVERTER FOR PHOTOVOLTAIC APPLICATIONS https://doi.org/10.36713/epra6933	Mr.A.VinothKumar, Dr.S.Vijayabaskar, Ms.C.Selsiya	71-75
14	LINGUO CULTUROLOGY AS A DIRECTION OF LINGUISTICS	Mamadaliyeva Feruza Alimzhanovna, Kodirova Feruza Kakhramanovna	80-82
15	THE USE OF ICT FOR THE DEVELOPMENT OF PROFESSIONAL	Akhmedova Mukaddas Hodimatovna, Hosilova Farida Rustamdjanovna	83-86

	FOREIGN LANGUAGE ORAL SPEECH SKILLS		
16	METHODS OF TEACHING FOREIGN LANGUAGES IN THE INSTITUTE OF ARTS AND DESIGN	Inoyatova Dilorom, Umarova Dilfuza	87-90
17	METHODS OF ORAL SPEECH DEVELOPMENT IN THE CLASSROOM OF RUSSIAN AS A FOREIGN LANGUAGE	Yadgarova Guzal Isanbayevna, Begmatova Navruza Abdukhomidovna, Shakarova Feruza Dolievna	91-94
18	A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS HINDUSTAN UNILEVER LIMITED WITH REFERENCE TO COIMBATORE	S. Gayathri, Dr. S. Gandhimathi, Dr. S. Gunasundari	95-99
19	PHILOSOPHICAL NATURE AND MISSION OF FAMILY AND MARRIAGE RELATIONS OF THE UZBEK PEOPLE	Komilov Ruzi Rabievich (PhD)	100-103
20	A STUDY ON ACADEMIC ANXIETY AMONG SECONDARY SCHOOL STUDENTS IN AIZAWL DISTRICT https://doi.org/10.36713/epra6702	M.S.Dawngliani, Prof. Lallianzuali Fanai, Dr. Vanlaltanpuui	104-108
21	CHRONICLE OF COURAGE: KASHKADARYA PEOPLE	Feruza Samatova	109-111
22	ART MANAGEMENT IN THE FIELD OF SOCIAL AND CULTURAL ACTIVITIES	Turabek Raufovich Fayziyev	112-116
23	INHERITANCE AS AN IMPORTANT FACTOR IN FORMING A CULTURE OF TOLERANCE IN YOUNG PEOPLE	Isroilov Bektosh Erkinovich	117-120
24	ON A DIFFERENTIAL EQUATION WITH AN INVOLUTION	G. A. Sodikova	121-123
25	RULES FOR THE CHARACTERISTICS OF TRACTOR TIRE PARAMETERS ON A NON-HORIZONTAL SUPPORT SURFACE	Melibayev Mahmudjon, Dadahodzhaev Anvarjon	124-137
26	USING THE SONG TO LEARN SPANISH	Tuychiyeva M.J., Urinbayeva D.	138-140
27	STYLISTIC MEANS IN RUSSIAN AND UZBEK TRANSLATIONS OF THE NOVEL "DON QUIXOTE"	Tursunova Parvina, Tuychiyeva Maxchexra, Djalilova Sarvara	141-143
28	QUALITATIVE ANALYSIS OF PHYTOCHEMICALS IN SELECTED SEAWEEDES OF MANDAPAM COAST, RAMESWARAM, INDIA https://doi.org/10.36713/epra6783	Maria Puspham Grace, M Rajithra R, V.Ilakkiya, Dr.B.Dhanalakshmi	144-160
29	Qualitative analysis of Phytochemical studies on Sargassum wightii and Padina gymnospora https://doi.org/10.36713/epra6784	Maria Puspham Grace, M Rajithra R, V.Ilakkiya, Dr.B.Dhanalakshmi	161-175
30	VOLLEYBALL PLAYERS' SKILL OUTPUT IN RESPONSE TO PLYOMETRIC TRAINING	S. Senthil Kumaran, P. Jenith, A. Abdul Halik, N. Kodeeswaran	176-179
31	INTERACTIVE METHODS TEACHING THE RUSSIAN LANGUAGE IN A NON-LANGUAGE UNIVERSITY	Abdusalamova Fatima Abdugafurovna, Khashimova Feruza Uralovna	180-183
32	CONSUMER ATTITUDE AND PURCHASE INTENTION TOWARDS ORGANIC APPAREL WITH SPECIAL REFERENCE TO COIMBATORE CITY	Dr.M.Nithya Devi, L.Yasodha Devi	184-188
33	A STUDY ON CUSTOMER	Yamuna.T,	189-193

	SATISFACTION TOWARDS HIMALAYA PRODUCT SPECIAL REFERENCE WITH TIRUPUR DISTRICT	Mr. M .R.Chandra Sekar	
34	A STUDY ON CUSTOMER SATISFACTION LEVEL TOWARDS HP LAPTOPS	J.Arokia Ashwin Kumar, Dr. S. Gandhimathi	194-197
35	A STUDY ON PROBLEMS OF HUMAN RESOURCES MANAGEMENT AND THEIR IMPACT IN ORGANISATIONAL PERFORMANCE IN TNQ TECHNOLOGIES	P.Alfred Godwin, Dr. R.Guna Sundari	198-201
36	A STUDY ON CUSTOMER SATISFACTION AND PREFERENCE TOWARDS LAKME BRAND PRODUCTS	Baby Maheswari, Mr. P. Vimal Kumar	202-206
37	A STUDY ON CUSTOMER EXPECTATION AND SATISFACTION TOWARD SERVICE PROVIDE BY AMBAL AUTO IN COIMBATORE CITY	Naveen Kumar. V, Mr. M .R. Chandra Sekar	207-211
38	A COMPARATIVE STUDY ON CUSTOMER SATISFACTION BETWEEN JIO AND BSNL SERVICE PROVIDER WITH REFERENCE TO AVINASHI	Vishnu Prakash.A, Mr. M.A.Prasad	212-216
39	A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS SOFT DRINKS SPECIAL REFERENCE WITH COCO COLA IN TIRUPUR CITY	Sathya . M, Mr. M .R .Chandra Sekar	217-221
40	ASSESSMENT OF INFORMATION TECHNOLOGY EMPLOYABILITY SKILLS AMONG BUSINESS EDUCATION STUDENTS IN TERTIARY INSTITUTIONS IN EKITI STATE, NIGERIA	Akindahunsi, Yemisi Olajumoke, Dr. Haruna, Alhaji Jibrin, Malan, Patience Ukaiko	222-230
41	EFFECTS OF ANTHROPOGENE POLLUTION ON URBAN ECOSYSTEM https://doi.org/10.36713/epra6785	Misliddin Muhammatovich Khalmatov, Bokhodirkhodja Sharibkhodjaevich Ismoilkhodjaev, Dilmurod Dekhkanovich Khusanov, Hamdam Tursunov	231-237
42	AUTHENTICATION BY ENCRYPTED NEGATIVE PASSWORD	Haseeb Ur Rahman, Mohd Asghar, Mohd Abdul Salman	238-242
43	AGE-RELATED FEATURES OF THE STRUCTURE OF DISEASES OF THE ORAL MUCOSA IN CHILDREN	Ismailov Ilxomjon Xurbaevich	243-245
44	PRAGMATIC NORMS INTO LANGUAGE	Shokhruz Askarjon ugli Bozorov, Yusuf Sobir ugli Khayrullaev	246-248
45	THE ROLE OF NATIONAL VALUES IN THE DEVELOPMENT OF INTELLECTUAL POWER OF YOUTH	Shohsanam Sharifboyevna Bobojonova	249-250
46	THE PROBLEM OF AREAL STUDY OF DIALECTS	Olloyorov Quvondiq Madiyorovich, Madiyorov Shikhnazar Quvondiq oqli	251-256
47	THE ROLE OF FEEDBACK IN TEACHING ESL CLASSES	Sapaeva Bibijon Rustamovna, Gayratova Sarvinoz Dadaboyevna, Rajapova Navbahor Narimonovna	257-259
48	FURTHER ENHANCEMENT OF NATIONAL IDENTITY OF YOUTH: PROBLEMS AND SOLUTIONS	Baykabilova Pariozod Amanbayevna	260-263

49	PROBLEMS WHICH OCCUR IN TRANSLATING AND THEIR SOLUTIONS	Razakova Shakhnoza Dusmamatovna	264-269
50	THE PHENOMENON OF PHYSICAL MATURITY AND ITS DEVELOPMENT	Iskandarov Nurbek Sharifboevich	270-273
51	STUDY OF SELF COMPACTING CONCRETE	Niraj Kumar, Devendra Kumar Sharma, Ritesh Kumar	274-276
52	DIGITAL FISHING APPLICATION FOR FISH FARMERS	Mrs. Paridhi Singhai, Prof. Hirendra Hajare	277-280
53	A STUDY ON CUSTOMER SATISFACTION TOWARDS ELECTRONIC PRODUCT SPECIAL REFERENCE WITH LG IN TIRUPUR CITY	Sridhar. S, Mr. M. R, Chandrasekar	281-285
54	THE NUTRITIONAL ANAEMIA AND ITS RELATION BY THE EATING OF CHEESE OR YOGURT AMONG PREGNANT WOMEN IN ELOBIED CITY, WEST OF SUDAN	Tahani Ahmed Mahmoud Doudi , Mirghany Elnager Ahmed Ibrahim Mohammed Ismail Humaida	286-289
55	THE FACTORS CONTRIBUTED TO PRESENCE OF ANAEMIA AMONG THE PREGNANT WOMEN IN EL-OBIED CITY-NORTH KORDOFAN STATE-SUDAN	Mirghany Elnager Ahmed Ibrahim, Tahani Ahmed Mahmoud Doudi , Mohammed Ismail Humaida	290-295
56	DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE MUCOSA OF THE ORAL CAVITY	Axunjonova Gulnozaxon Muxammadsobirovna	296-298
57	ON THE QUESTION OF STUDYING PREDICATION IN THE ASPECT OF SPEECH ACTIVITY	Yuldashev A.U.	299-301
58	THEORETICAL BASIS OF TEACHING THE PEDAGOGICAL COMMUNICATION OF FUTURE TEACHERS OF THE ENGLISH LANGUAGE	Ibragimova F.H.	302-304
59	MAIN PROBLEMS OF MODERN TEXT LINGUISTICS	Shika Nelya Nikolaevna, Mullabayeva Lola Shaniyazovna	305-308
60	PEDAGOGICAL MOTIVATION IN FOREIGN LANGUAGE LEARNING, GENERAL AND INDIVIDUAL MOTIVATION	Azizova Gulnoza Ganijanovna	309-312
61	TREND OF GROWTH AND PRODUCTIVITY OF HORTICULTURAL PRODUCTS IN INDIA AND ODISHA https://doi.org/10.36713/epra6948	Smruti Rekha Basa, Dr. Kabita Kumari Sahu	313-323
62	A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS AYURVEDIC PRODUCTS SPECIAL REFERENCE WITH LEVER AYUSH PRODUCTS IN COIMBATORE CITY	Ms.P.Priyanka, Mr.M.R. Chandra Sekar	324-328
63	A STUDY ON AWARENESS ATTITUDE AND BEHAVIOUR OF CONSUMERS TOWARDS ECO FRIENDLY PRODUCTS IN COIMBATORE CITY	Mr. P. Vimal kumar, Mr. V. Jayaprakash	329-334
64	AN ENHANCED METHOD OF LIVER LESION DETECTION USING DEEP NEURAL NETWORK, WATERSHED TRANSFORM AND GAUSSIAN MIXTURE MODEL TECHNIQUES IN MR IMAGES	A.BathshebaParimala, R.S.Shanmugasundaram	335-340

	https://doi.org/10.36713/epra7055		
65	KUPKARI IS A GAME OF HEROES	Ikhtiyor Jalilov, Faxriddin Rahmonov	341-344
66	THE ROLE OF JOYBAR KHOJARS IN THE SOCIO-POLITICAL LIFE OF THE BUKHARA KHANATE DURING THE SHAYBANIYAN PERIOD	Saidova Charos	345-347
67	OCCUPATIONAL COMPETENCY CRITERIA OF TEACHERS IN PROFESSIONAL DEVELOPMENT AND THEIR ROLE IN THE PROFESSIONAL ACTIVITY OF TEACHERS	Saidmuradova Sitara Nabijonovna, Djamilova Latofat Omonovna, Imomov Chorshami Mamatalievich	348-351
68	NATIONAL ORIGINALITY IN THE FRENCH LANGUAGE ANOMASTIC PROBLEM	Nazirova Ozoda Zohid qizi	352-353
69	KNOWLEDGE OF DANGERS AND PRACTICE OF SELF-MEDICATION AMONG SECONDARY SCHOOL STUDENTS OF ANOHACHIA SOUTH LOCAL GOVERNMENT AREA, DELTA STATE, NIGERIA	Tawari Erebi Patricia , Boloya Vukumo Eric	354-359
70	SHORTCOMINGS IN ONLINE GERMAN LANGUAGE LEARNING	Musaeva Guzal Nematillaevna, Zainieva Hilola Shuhratullaevna	360-364
71	UNIVERSAL INJURIES SURROUNDED BY BASKET PLAYERS: AN OVERVIEW	S. Senthil Kumaran, A. Abdul Halik, S. Princy	365-368
72	FORMULATION AND EVALUATION OF GEFTINIB POLYMERIC NANOPARTICLES	Dr.G.Jagdish, Dr.Vibhor Kumar Jain, Ritesh Patel	369-374
73	COVID-19 MOST AFFECTED COUNTRIES – A DIVERSE APPROACH	Dr. Kannamani Ramasamy, Jayakumar. S	375-381
74	A STUDY ON CONSUMER SATISFACTION TOWARDS ROYAL ENFIELD USERS IN COIMBATORE CITY	Muthu Gowtham P, Mr. P Vimal Kumar	382-387
75	A STUDY ON CUSTOMER SATISFACTION TOWARDS FAST MOVING CONSUMER GOODS (FMCG) SPECIAL REFERS WITH COIMBATORE CITY	Hariharan.R, Mr. M .R.Chandra Sekar	388-393
76	TRANSFORMATIONAL LEADERSHIP IN PRIVATE UNIVERSITIES IN DKI JAKARTA	I Wayan Sugiana, Azlizan Talib, Mohd Nazaruddin Yusoff @ Abdul Rahman	394-399
77	A STUDY ON CUSTOMER PERCEPTION AND SATISFACTION TOWARDS JK TYRES IN COIMBATORE CITY	Hari Prasath G, Mr. Vimal Kumar P	400-404
78	BASICS OF ARTIFICIAL NEURAL NETWORKS FUTURE SCOPES AND APPLICATIONS	Atharv Rathore, Anidhya Gangrade, Chinmay Pacharne	405-412
79	E-VOTING SYSTEMS USING BLOCKCHAIN: A SYSTEMATIC REVIEW AND FUTURE RESEARCH DIRECTION https://doi.org/10.36713/epra7157	Dhiraj Amrutkar, Gaurav Dongare, Sayog Sonune, Archana Y. Chaudhari	413-423
80	DEVELOPMENT OF A SCALE TO MEASURE UNIVERSITY TEACHERS' ASSESSMENT LITERACY IN OSUN STATE https://doi.org/10.36713/epra6845	Adediwura, Alaba Adeyemi, Ajayi, Oyedokun Samuel	424-434

81	A STUDY ON MARKETING STRATEGIES TOWARDS CHINESE BRAND MOBILE PHONES WITH SPECIAL REFERENCE TO COIMBATORE CITY	Mr. Aswanth Eswar .S, Mr. D. Shanmugavadivel	435-441
82	A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS REDMI MOBILE PHONE WITH SPECIAL REFERENCES TO COIMBATORE CITY	Ms. Harini .S, Mr. D. Shanmugavadivel	442-447
83	A STUDY OF CUSTOMER SATISFACTION IN POST OFFICE SAVING SCHEMES WITH SPECIAL REFERENCE IN COIMBATORE CITY	Mr. Naveen. M, Mr. D. Shanmugavadivel	448-453
84	TO STUDY ON CUSTOMER SATISFACTION OF BIG BAZAAR ONLINE SHOPPING	Mr. Ukesh Rahul S, Mr. K.Ponnumani	454-458
85	A REVIEW STUDY OF TRAFFIC SIGNAL VIOLATION DETECTION USING ARTIFICIAL INTELLIGENCE https://doi.org/10.36713/epra7139	Dantene Davis, Abhishek Singh, Amarjeeth Singh, Fahad Ahmad	459-464
86	A STUDY ON CONSUMER SATISFACTION TOWARDS E-COMMERCE	Ms. Gopika B, Mr. K.Ponnumani	465-469
87	COVID-19 AND THE FUTURE OF GIRL CHILD EDUCATION IN PANKSHIN AND ENVIRONS	Nokshuwan, Emmanuel Jidauna, Polmi, Ibrahim, Shittu, A. Soliu	470-477
88	5G SMART DIABETES: TOWARDS PERSONALIZED DIABETES DIAGNOSIS WITH HEALTHCARE BIG DATA CLOUDS	Sara khulaidi, Syed Muqheet Ur Rahman Asim, Mohd Safi Uddin	478-483
89	A STUDY ON OPINION OF PARENTS REGARDING THE IMPACT OF ADVERTISEMENT ON CHOCOLATE AMONG THEIR CHILDREN WITH SPECIAL REFERENCE TO COIMBATORE CITY	Swetha A, Mr. P. Vimal Kumar	484-490
90	THE ECONOMIC IMPACT OF COVID-19 PANDEMIC ON THE TRAVEL AND TOURISM INDUSTRY: KERALA EVIDENCE	Siby K M, Dr.Varun V Varghese, Shiju C R	491-497
91	AESTHETICS OF THE FIGURATIVE NOVEL BY ALBERT CAMUS "THE PLAGUE"	Tursunova Nargiza Khamrakulovna	498-501
92	INFLUENCE OF SUPERVISION ON ORGANIZATIONAL EFFICIENCY IN THE NIGERIAN BANKING SECTOR	John Ldama (Ph.D)	502-512
93	NATURAL RESOURCES OF MEDICINAL PLANTS OF FERGANA VALLEY	Ergashali Yu. Ruzmatov, Dilmurod D.Usmonov, Xusanboy E. Yuldashev	513-517
94	STUDENTS' PERCEPTION ON THE SELF-LEARNING MODULES IN DETERMINING THE ENGLISH PROFICIENCY OF GRADE 8 STUDENTS OF ADELINA I NATIONAL HIGH SCHOOL	Jhunisa Ann A. Merueña	518-525



EFFECT OF GLASS POWDER AND SILICA FUME IN CONCRETE –AN EXPERIMENTAL STUDY

Mrs.J.Kalaiselvi Nivedha^{*1}

*^{*1}Assistant Professor, Department of Civil Engineering, P.A. College of engineering and Technology, Pollachi, Tamilnadu, India*

Ms. P.Ranjitha^{*2}

*^{*2}Assistant Professor, Department of Civil Engineering, P.A. College of engineering and Technology, Pollachi, Tamilnadu, India*

Mr. K.Jeyavelu^{*3}

*^{*3}Assistant Professor, Department of Civil Engineering, P.A. College of engineering and Technology, Pollachi, Tamilnadu, India*

ABSTRACT

Cement contributes 7% of carbon dioxide in global warming in order to reduce carbon emission in atmosphere cement is partially replaced by silica fume in this project. The effects of partially replacing of cement with silica fume and fine aggregate with glass powder in concrete were studied and therefore found that some extent could be replaced which contributes in strength development. Cement was replaced with silica fume at a constant percentage of 10% and fine aggregate was replaced with glass powder at varying percentages such as 0%, 2.5%, 5%, 7.5% and 10% .The specimens were tested for compressive strength, split tensile strength and flexural strength at the age of 7 and 28 days and were compared with the results of conventional concrete. The overall test results indicated that the waste glass powder and silica fume could be utilized in concrete as a good substitute of cement and fine aggregate.

KEYWORDS: Silica Fume, Glass powder, Compression Strength, Split Tensile Strength, Flexural Strength

1. INTRODUCTION

Nowadays Concrete is widely used in construction industry because of their various advantages like accessibility, availability and economy associated with it. Generally Concrete is made by the mixing of binding material, generally cement, fine aggregate and coarse aggregate with water. Cement is the main components of concrete, which works as a binder between coarse aggregate and fine aggregate, with the help of water. It has own environmental impacts and contributes largely to concrete. However, the manufacturing of cement leads to the release of significant amount of CO₂, a greenhouse gas. In order to avoid such greenhouse gases

effect on environment this project reduces the usage of cement by replacing silica fume.

2. OBJECTIVE

- Silica fume is a byproduct which is a hazardous material to the environment if used to in the concrete can defend environmental degradation.
- Waste glass powder can be recycled and used in concrete which leads to cause a shield to the wastage of materials by recycling.



- It economically helps to reduce the cost of concrete by adding these waste materials and also helps to keep the surrounding sustain.

micro silica, The replacement of cement by silica fume increases compression and split tensile strength and is also a best replacement of cement.

3. MATERIALS USED

Cement

43 Grade Ordinary Portland Cement (OPC) conforming to IS 8112-1989 is used in this project.

Fine aggregate

Fine aggregate used in this project was locally available and conforming to zone II with specific gravity 2.62.

The testing of Fine aggregate was done as per Indian Standard Specification IS: 383-1970.

Coarse aggregate

20 mm and down size and specific gravity 2.93 was used. Testing of coarse aggregate was done as per Indian Standard Specification IS: 383-1970.

Glass powder

Glass Waste available locally was collected and made into desired size glass powder. Glass waste is very hard material. Glass powder is used as replacement of Fine aggregate.

Silica Fume

Silica fume is an amorphous (non-crystalline) polymorph of silicon dioxide, silica. It is also known as

4. METHODOLOGY

The methodology followed to carry out the project work. As the result of literature study, the properties of Glass Powder and Silica Fume are obtained regarding mix design procedures. Using that information, the preliminary tests are done to obtain the data for mix design formulation. After achieving a complete mix design procedure, Glass Powder and Silica Fume of trial mixes are prepared to check the target Strength. Then possible replacements are studied and finalized.

Materials required for the project are collected and tests are carried out on those materials to analyse the properties. Using the mix design, Glass Powder and Silica Fume are casted. After 24 hrs, the Concrete specimens are demoulded Various tests like compressive strength test, flexural strength test, split tensile strength are carried out to evaluate the performance of concrete. And from the above test results conclusion are made.

The methodology of this study was followed by the given flowchart



Figure 3.1 Flowchart for methodology

5. MIX PROPORTIONING

Table 5.1 Mix Proportioning

Mix	Water (Kg)	Cement (Kg)	Silica fume (Kg)	Fine aggregate (Kg)	Glass powder (Kg)	Coarse aggregate (Kg)	w/c (Kg)
M1	6.547	11.902	0	25.18	0	41.69	0.55
M2	5.251	8.591	0.955	20.194	0	33.432	0.55
M3	5.251	8.591	0.955	19.689	0.505	33.432	0.55
M4	5.251	8.591	0.955	19.187	1.009	33.432	0.55
M5	5.251	8.591	0.955	18.679	1.515	33.432	0.55
M6	5.251	8.591	0.955	18.175	2.019	33.432	0.55



6. CASTING OF SPECIMEN

Table 6.1 Casting of Specimen

S.No	Mix	No. of Specimen			Total
		Cube	cylinder	prism	
1	M1	6	6	6	18
2	M2	6	6	6	18
3	M3	6	6	6	18
4	M4	6	6	6	18
5	M5	6	6	6	18
6	M6	6	6	6	18

7. TEST RESULTS AND DISCUSSIONS

7.1 General

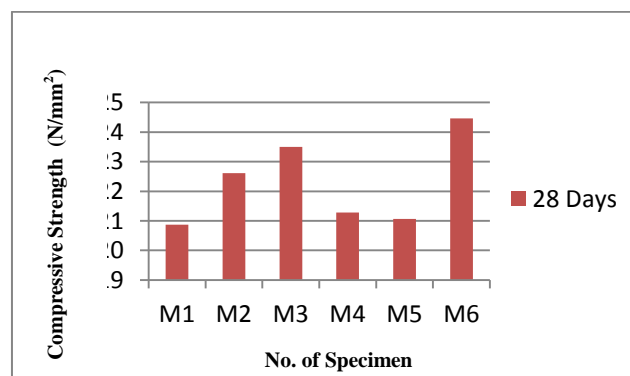
Cubes were casted with W/C ratio of 0.55 by considering the replacement of bottom ash in percentages. The casted cubes are tested for 28 days to study their strength performance with the conventional concrete.

7.2 Compressive strength test (conventional concrete test)

Compressive strength test was conducted by as per, "IS 516 (1959): Method of Tests for Strength of concrete". 150 mm x 150 mm x 150 mm, standard cube mould is to be used for concrete mix.

Table 7.2 Compressive Strength

Mix	Compressive Strength (N/mm ²)			Mean(N/mm ²)
	S1	S2	S3	
M1	20.85	20.89	14.71	14.71
M2	22.60	22.63	14.95	14.95
M3	23.30	23.60	16.94	16.94
M4	21.29	21.25	16.93	16.93
M5	21.03	21.10	14.04	14.04
M6	24.43	24.49	16.71	16.71

**Figure 7.2 Compressive Strength**

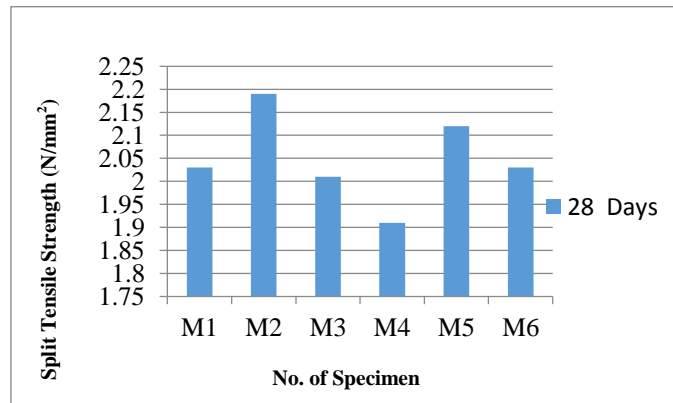
By comparing conventional and several percentage of Silica Fume and Glass Powder of 10% Glass Powder, 10% Silica Fume has the higher compression strength in 28 days testing of cube.

7.3 Split Tensile Strength Test

Split Tensile strength test was conducted by using 150 mm diameter x 300 mm height, standard cylinder mould is to be used for concrete mix.

**Table 7.3 Split Tensile Strength**

Mix	Split Tensile Strength (N/Mm ²)			Mean(N/Mm ²)
	S1	S2	S3	
M1	2.05	2.01	2.05	2.02
M2	2.18	2.30	2.11	2.15
M3	1.99	2.01	2.14	2.05
M4	1.91	1.98	1.99	1.92
M5	2.05	2.10	2.11	2.10
M6	2.02	2.15	2.01	2.04

**Figure 7.3 Split Tensile Strength**

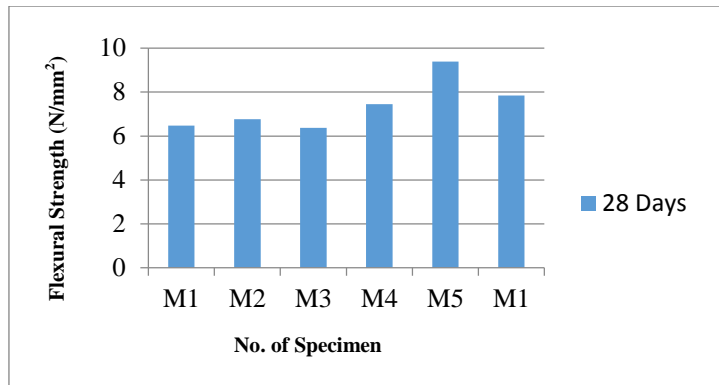
By comparing conventional and several percentage of glass powder and silica fume concrete 0% of glass powder and 10% of silica fume concrete has the higher split tensile strength in 28days testing of cylinder.

7.4 Flexural Strength Test Result

Flexural Strength test was conducted by using 100 x 100 x 500mm, standard prism mould is to be used for concrete mix.

Mix	Flexural Strength (N/mm ²)			Mean(N/mm ²)
	S1	S2	S3	
M1	2.05	2.01	2.05	2.02
M2	2.18	2.30	2.11	2.15
M3	1.99	2.01	2.14	2.05
M4	1.91	1.98	1.99	1.92
M5	2.05	2.10	2.11	2.10
M6	2.02	2.15	2.01	2.04

Table 7.4 Flexural Strength

**Figure 7.4 Flexural Strength**

By comparing conventional and several percentage of glass powder and silica fume concrete 7.5% of glass powder and 10% of silica fume concrete has the higher flexural strength in 28days testing of prism.

8. CONCLUSION

Based on the results obtained from this study, the following conclusions can be drawn:

1. The maximum compressive strength is obtained at 10% replacement of glass powder and 10% replacement of silica fume at 28 days.
2. The maximum split tensile strength is obtained at 2.5% replacement of glass powder and 10% replacement of silica fume at 28 days.
3. The maximum flexural strength is obtained at 7.5% replacement of glass powder and 10% replacement of silica fume at 28 days.
4. The partial replacement of fine aggregate with glass powder and cement with silica fume showed better performance compared to conventional concrete.
5. It also showed increase in compression strength, flexural strength, and split tensile strength.
6. Use of waste glass powder in concrete is economical and paves way to recycling of waste glass.

7. REFERENCES

1. Akhil S. Raju, K.B. Anand, P. Rakesh (2020) "Partial replacement of Ordinary Portland cement by LCD glass powder in concrete", pp 2214-7853.
2. Aman Roy Patil, Mr. Tushar saxena (2019) "Recycling of Waste Glass as Partial Replacement of Sand in Concrete Effects on Compressive Strength", *International Research Journal of Engineering and Technology*, pp 1778 - 1788
3. Ankur Mehtaa, Deepankar Kumar Ashish (2019) "Silica fume and waste glass in cement concrete production: A review", *Journal of Building Engineering*, pp 2352-7102.
4. S Arivalagan, V.S Sethuraman (2020) "Experimental study on the mechanical properties of concrete by partial replacement of glass powder as fine

aggregate: An environmental friendly approach", pp 2214-7853.

5. Lakhbir Singh, Arjun Kumar, Anil Singh (2016) "Study of Partial Replacement of Cement by Silica Fume", *International Journal of Advanced Research* (2016), pp 104-120.
6. M. Mazloom A.A. Ramezaniapour ,J.J. " Brooks Effect of silica fume on mechanical properties of high-strength concrete", *cement and concrete composite*, pp 347-357
7. Mehmet Saribiyik, Abdullah Piskin, Ali Saribiyik (2013) "The effects of waste glass powder usage on polymer concrete properties", *Construction and building materials*, pp 840-844.
8. S. Rahman, M.N. Uddin (2018) "Experimental Investigation of Concrete with Glass Powder as Partial Replacement of Cement", *Civil Engineering and Architecture*, pp 149-154.
9. D. Pedro, J. de Brito, L. Evangelista (2017) "Evaluation of high-performance concrete with recycled aggregates: Use of densified silica fume as cement replacement", *Construction and Building Materials*, pp 0950-0618.



INCREASING SPEECH CULTURE OF NON-LANGUAGE UNIVERSITY STUDENTS TEACHING RUSSIAN LANGUAGE

Riskulova Dilorom Shagiyazovna

Lecturer at the Department of Modern Russian language Uzbek state University of World Languages, Tashkent

SUMMARY

The article deals with the problem about development of written speech in Russian. In this article is given some exercise patterns, to develop knowledge and skill habits of learners in this sphere.

KEY WORDS: *speech culture, Russian language, speech development, oral and written communication, exercises, teaching methods.*

ПОВЫШЕНИЕ РЕЧЕВОЙ КУЛЬТУРЫ СТУДЕНТОВ НЕЯЗЫКОВОГО ВУЗА, ОБУЧАЕМЫХ РУССКОМУ ЯЗЫКУ

Рискулова Дилором Шагиязовна,

*Преподаватель кафедры современного
русского языка Узбекского государственного
университета мировых языков. Ташкент.*

Аннотация

В статье рассматривается проблема развития речевой культуры студентов нефилологического вуза, изучающие русский язык. В этой статье приведены схемы упражнений для развития знаний и навыков студентов в этой сфере.

Ключевые слова: *речевая культура, русский язык, развитие речи, устная и письменная форма коммуникации, упражнения, методика преподавания.*

Повышение речевой культуры обучаемых русскому языку – одна из актуальных задач, стоящих перед современной школой и вузом. Особое значение имеет работа над правильностью речи, ее соответствием языковым нормам. Занятие по развитию речи – это многосторонняя работа по языку, направленная на то, чтобы обучаемые овладели не только

грамматической теорией и орфографическими навыками, но и умением правильно произносить слова, выбирать нужные слова и правильно употреблять их в речи, строить словосочетания, предложения и связную речь. В целом развитие речи – это и есть работа над речевой культурой обучаемых в устной и письменной форме. Хотя устная и письменная форма коммуникации



обладают своей спецификой и различаются по многим параметрам, решающее значение для их взаимодействия имеет не различие, а совпадение плана содержания и плана выражения. Членение речи на слова и предложения, осуществление правильных связей между предложениями в частях сложного целого, между отдельными компонентами этого целого необходимое условие правильного построения речи в соответствии с нормами современного литературного языка и логики.

При обучении письменной речи необходимо учитывать различие между формами речи, разнообразие жанров, с которыми обучаемым приходится иметь дело при смысловом анализе предложения, при составлении пересказов. Все это надо давать во взаимосвязи и последовательности.[1]

Упражнения по развитию речи должны быть многокомпонентными. Строя занятия по связной речи, мы должны научить обучаемых умению самостоятельно строить план и по плану развертывать содержание или тему, заданную им преподавателем, для каждой мысли выбрать подходящую лексику и синтаксическую структуру, которые наилучшим образом выражали бы представления и суждения начинающих авторов.[2]

По-нашему мнению, умение писать развивается на основе системы упражнений, которые отвечают следующей основной линии: от репродукции письма к его более или менее свободным перифразами и, наконец, к продукции. То есть, самостоятельной речевой деятельности. Путь от рецензии к репродукции и продукции при обучении письменной речи на базе текста можно видеть в следующих этапах: понимание – смысловой анализ текста, восстановление основного информативного содержания текста, целевая трансформация информативного характера материала текста.

В методике преподавания русского языка существует довольно большое разнообразие письменных работ.[3] В данной статье мы предлагаем развитие навыков и умений, обучаемых в области смыслового анализа читаемого материала, заключающегося в выявлении степени и глубины информативного содержания текстов и некоторых особенностей его оформления. Анализ текста в упражнениях проводится последовательно на разных контекстуальных уровнях. Обучаемые, выполняя задания, оперируют такими единицами связной речи, как предложение, абзац, фрагмент текста.[4]

Смысловой анализ текста проводится по следующим этапам:

I.Выделение информативного центра предложения, абзаца, фрагмента текста. Здесь можно предложить следующие задания:

а) В данном тексте проанализируйте выделенные нормативные центры в предложениях. Обратите внимание на то, что в письменной речи расположение информативного центра в конце предложения является типичным, но возможны и другие варианты.

Московский университет основан по инициативе великого русского ученого М.В.Ломоносова в 1755 году. Он всегда являлся центром русской науки и просвещения. В университете учились знаменитые русские писатели и поэты, передовые общественные деятели. В нем работали выдающиеся русские ученые.

б) Прочитайте текст. Проанализируйте выделение информативного центра в абзацах, отвечая на вопрос: О чем говорится в абзаце. Обратите внимание на то, что главную мысль абзаца выражает первое предложение. Расположение информативного центра в начале абзаца является типичным. Другие предложения абзаца расширяют и углубляют его основную мысль. А также обосновывают основные положения абзаца (доказательства) или иллюстрируют их (примеры, цифровые данные) некоторые предложения абзаца служат для логического оформления текста.

Государственная Третьяковская галерея – это бесценные собрания национального изобразительного искусства. В ней собрана коллекция русской иконописи, живописи, графики и скульптуры с XI века до наших дней.

Галерея называется Третьяковской потому, ее возникновение связано с именем Павла Михайловича Третьякова (1832-1898), выдающегося деятеля русской культуры второй половины XIX века. Купец по происхождению, крупный фабрикант, владеющий текстильными мануфактурами, П.М. Третьяков принадлежит к прогрессивным слоям купеческой интеллигенции.

в) Прочитайте текст. Разделите его на абзацы. Составьте вопросы к каждому абзацу текста. Запишите их.

г) Прочитайте текст. Составьте план в форме вопросов. Запишите его. Дайте контекстуальные ответы на вопросы; опираясь на текст. Запишите их.

д) Прочитайте текст. Проанализируйте цепную связь суждений в речи посредством логического повтора. Проследите, как одно суждение вытекает из другого. Дополняет. Развивает его. Давая начало третьему.



У каждого города свои традиции. И среди традиций одна, как правило, бывает главной. Так или иначе, она пронизывает все прочие традиции своим духом. Для Петербурга такой традицией является традиция революции. Городу было всего 100 лет, когда на его Сенатскую площадь вышли декабристы.

II. Анализ соотношения информации вопроса и ответа в тексте и формулировка вопросов:

ж) Прочитайте предложения и вопросы к нему. Обратите внимание на формулировку вопросов. *Н.В.Жуковский великий русский ученый в области механики, основоположник аэродинамики – кто такой Н.В. Жуковский? В.И.Мухина – выдающийся скульптор. – Кто такая*

1.Кем является А.Н.Калмогоров?

2.С каким ученым заведением связана деятельность А.Н.Калмогорова?

3.Какова научно – педагогическая деятельность А.Н.Калмогорова?

4. С чем совмещает свою научно-педагогическую деятельность академик А.Н.Калмогоров?

В.И.Мухина? передвижники – прогрессивные русские художники, члены «Товарищества по организации передвижных выставок». – Кто такие передвижники?

III. Вычленение основной проблематики текстов, оформление его в вопросительной и повествовательной форме; понимание логики последовательности подачи информации. Оформление плана.

а) 1.Прочитайте текст. Составьте план в форме вопросов. Запишите их.

2.Дайте текстуальные ответы на вопросы. Запишите их.

б) Составьте варианты плана.

А.Н.Калмогоров является одним из крупнейших математиков современности.

Вся деятельность А.Н.Калмогорова связана с Московским университетом.

А.Н.Калмогоров является создателем научной школы.

Академик А.Н.Калмогоров совмещает свою научно-педагогическую деятельность с большой организационной деятельностью.

IV. Анализ и продолжение вопросно-ответного текстуального единства в пределах текста и при сравнении вопроса и текста.

а) Прочитайте отрывок из интервью летчика – космонавта. Проанализируйте соотношение вопроса и ответа.

Вопрос: *Как долго вы знали академика С.П.Королева? Какие черты характера, присущие этому выдающемуся человеку, особенно запомнились вам?*

Ответ: *Я знал Сергея Павловича более 15 лет. Самая характерная черта его характера – громадная энергия. Этой энергией он умел заражать окружающих. Он был человек очень решительный, часто довольно суровый. В то же время были в нем мальчишества. Он легко мог увлечься какой – нибудь игрой.*

Вопрос: *Почему С.П.Королева называют основоположником теоретической космонавтики?*

Ответ: *По месту, который С.П.Королев занимает в истории, он равен к Э. Циолковскому – основателю теории космического полета. Циолковский дал первые формулы расчета, показал путь в космос. С.П.Королев был участником всех разработок практической космонавтики – это ракеты, двигатели, приборы, наземные пусковые устройства.*

а) Прочитайте текст. Составьте план в форме вопросов. Запишите его.

б) дайте контекстуальные ответы.

в) Дайте свои ответы на вопросы, опираясь на текст. Запишите их.

V. Первоначальные навыки тезирования и конспектирования.

1) а) Проанализируйте ответы на первые три вопроса.

б) продолжите ответы на составленные вами вопросы.

1. Где и когда родился А.С.Пушкин?

2. Как прошло его детство?

3. Где учился А.С.Пушкин?

2) дополните данные суждения, разверните их.

1. Максим Горький – выдающийся писатель XX века.

2. Фильм «Война и мир» снят по всемирно известному роману Л. Н. Толстого.

3. Москва – столица России.

4. М.В.Ломоносов принадлежит к числу величайших деятелей науки и культуры всего человечества.

VI. Анализ и продолжение вопросного ответного единства по содержанию.

1) Составьте вопросы к тексту. Запишите их по памяти.

2) Найдите абзацы, в которых содержится ответ, на поставленный плане вопрос.



- 3) Определите информативные центры фрагментов текста.
- 4) Запишите вопросы. Выпишите предложения мысль словосочетания, выражающие главную мысль фрагмента.

VII. Анализ смысловой ткани абзаца, расположение основного информативного материала текста в логической последовательности.

1. Прочитайте тексты. Разделите тексты на абзацы. Составьте вопросы к каждому абзацу текста. Запишите их. Обратите внимание на построение абзаца, на его смысловую законченность, на логическую последовательность. Например, дан такой текст

Варшавская «сиренка».

На Костюшковской набережной в Варшаве возвышается скульптура «сирень» - девушки с рыбьим хвостом, с мечом и щитом в руках. Сирена, или «сиренка», так ласково называют ее варшавяне - герб столицы Польши. Скульптура эта была поставлена накануне второй мировой войны. Каждого, кто любит лицо «сиренки», поражает ее правильная строгая красота. И не все знают, что девушка, которая позировала для этой скульптуры, сама своей дальнейшей жизнью заслужила памятник. Звали эту девушку Кристина Крахельская. Кристина училась в Варшавском университете, когда гитлеровцы напали на ее родину. Девушка вступила в ряды борцов Сопротивления. В качестве связной она разъезжала из города в город С.П.Королева. Веселая, общительная, не теряющая самообладания в самые опасные моменты, Кристина пользовалась большим авторитетом среди местной молодежи, которая помогла ей в подпольной работе. У Кристины, как и подобает «сиренке», был прекрасный голос, и она часто пела раненым польским партизанам. Во время варшавского восстания Кристина Крахельская была, как всегда, впереди. Группа молодежи, среди которой находилась Кристина, под сильным обстрелом фашистов атаковала Дом печати. Пуля сразила Кристину. Девушка – героиня была посмертно награждена за отвагу боевым орденом – Крестом храбрых.

VIII. Составление текста по аналогии.

1) Прочитайте предложения и расположите их в логической последовательности. Проверьте полученный текст.

С.И.Вавилов.

1. Вавилов заложил основы микрооптики и совместно с другими учеными – оптики сверхсветовых скоростей.

2. Первая научная работа молодого ученого «тепловое выцветание красок» была выполнена им в 1915 году.

3. Ученый дал общую систематику явлений люминесценции.

4. В 1945 году С.М.Вавилов был избран президентом Академии наук.

5. В академии наук учреждена медаль имени Вавилова, присуждаемая ежегодно за выдающиеся работы в области физики.

2) Прочитайте текст. Проанализируйте связь суждений посредством параллельной связи между предложениями. Проследите, как одно суждение вытекает из другого, дополняет, развивает.

Отечество.

Родина – это очень много. Это и тропинка с бродом через ручей и пространство в одну шестую всей земной карты. Это и ракета, нацеленная к луне, и птицы, летящие на север над нашим домом. Это и Москва, и малые, в десять дворов деревеньки. Это имена людей, названия новых машин, танцы, которым неистово хлопают во всех городах земли. Это конструктор ракет и простой рабочий. Это мой отец – чабан. Это ты и я с нашим миром чувств, с нашими радостями и забавами. Родина – наша история. Это славные имена полководцев, великих Низами и Узеира Гаджибекова.

Весь материал, изложенный в данной небольшой статье, может быть использован для самостоятельной работы над текстом. Как базой продуцирования письменной связной речи.

Изучение русского языка - сложная задача. Это требует сотен часов изучения и постоянной регулярной практики. Это также очень полезный опыт; изучение русского языка открывает двери в новые культуры и даже новые способы мышления.[5].

Русский язык как предмет мировоззренческий призван обеспечивать единство и взаимодействие языка, культуры, личности в процессе обучения и развития этой личности. Поскольку язык - это не только средство общения между людьми, но и зеркало, хранилище культуры народа - его носителя, бесспорным представляется тот факт, что условием полноценной профессиональной подготовки учителя филологических и нефилологических специальностей, а также создания возможностей для успешной



коммуникации является знакомство с национальной культурой, отраженной в языке.

Использованная литература

1. **Бондаренко А.В.** Грамматическое значение и смысл. Л.: Наука, 1978. 175 с.
2. **Кожевникова К.** Об аспектах связности в тексте как целом// Синтаксис текста. М.: Наука, 1999, с. 49-67.
3. **Пахнова Т.М.** От текста к слову. Русская словесность, 1998, №1, с. 81-87.
4. **Синица Е.И.** Психология письменной речи учащихся. Автореф. дисс. д-ра пед. наук. - Киев, 1968.
5. **Турсунов И.Н.** Использование интернет - ресурсов для обучения русскому как иностранному языку студентов неязыковых вузов в период пандемии. /Русский язык как язык специальности в современном научном и образовательном пространстве. Материалы научно-практической конференции. 26 декабря 2020 года. НУУз.им.М.Улугбека. Стр.83-87.

REFERENCES

1. **Bondarenko A.V.** Grammatical meaning and meaning. L. : Nauka, 1978.175 p.
2. **Kozhevnikova K.** On aspects of connectivity in the text as a whole // Text syntax. Moscow: Nauka, 1999, p. 49-67.
3. **Pakhnova T.M.** From text to word. Russian literature, 1998, no. 1, p. 81-87.
4. **Sinitsa E.I.** Psychology of student writing. Abstract of thesis. diss. Dr. ped. sciences. - Kiev, 1968.
5. **Tursunov I.N.** The use of Internet resources for teaching Russian as a foreign language to students of non-linguistic universities during a pandemic. / Russian language as a language of specialty in the modern scientific and educational space. Materials of the scientific and practical conference. December 26, 2020, NUUU named after M. Ulugbek, pp. 83-87.



A STUDY ON STRESS MANAGEMENT AMONG WORKING PEOPLE IN PRIVATE SECTOR DURING COVID-19 PANDEMIC WITH REFERENCE TO CBE

Shrinithi.K.M

Student, Dr. N.G.P Arts and Science College , Coimbatore

Mr. M.A.Prasad

Assistant Professor (SG), Dr. N.G.P Arts And Science College,Coimbatore-048

ABSTRACT

Stress has become the 21st century buzz word, from the high pervading corporate echelons to the bassinets of teaching infants' nurseries we find this word liberally used. Stress Management can be defined as interventions designed to reduce the impact of stress in the work place. Today's workplace stress is becoming a major issue and matter of concern for the employees and the organizations. It has become a part of life for the employees, as life today has become so complex, at home as well as outside that stress is impossible to avoid. During the past decade the private sector had undergone rapid and striking changes, today it is believed all around the world that even a little bit of stress is undergone by a working employee. The job nature of private sector employees is very tedious as it involves the completion of target or work within a specified period. The employees can notice a number of symptoms indicating high level stress among them due to pressure in their work.

KEYWORDS: *Stress, workplace stress, personal and family problems, techniques.*

INTRODUCTION

Various events in life cause stress, i.e, from the starting with the birth of a child and enduring with the death of the dear one. Thus, stress is inevitable in our society. Researcher on stress makes it clear that, to enter in to the complex area of stress, especially in to the area of occupational stress, is very difficult. Stress is an avoidable consequence of modern living. The

STATEMENT OF THE PROBLEM

Stress plays a vital role in every person's life, both in personal life and job life. A study on stress management in and around Coimbatore is done with the low level of the employees. There are many employees working in day and night shifts, especially in this COVID-19 period. One of the reasons for this

present world is a fast changing and there are a lots of pressures and demands at work. These pressures at work lead to physical disorders. Many practical stress management techniques are available, some for use by health professional and others, for self-help, which may help an individual reduce their levels of stress, provide positive feeling of control over one's life and promote general well-being.

stress is based on the shifts they are undergone i.e., work from home basis. This study examines the individual stressors and organizational stressor in every company.

SCOPE OF THE STUDY

Job stress, which can be lead to the poor health and even cause injury. Workers who are all stressed are also



more likely to unhealthy, poorly motivated less productive and less safe at the work. Employers cannot usually protect workers from the stress arising outside of the work, but they can protect them from the stress that are arises through work. Stress at work can be a real problem to the organizations as well as for its workers. This study is helpful in arising the extent of stress experienced by the employees in Private Sector

OBJECTIVES OF THE STUDY

- To study the different aspects of work stress among employees.
- To identify the major cause for stress among employees.
- To know how the employee manage the stress.
- To understand how employee react for the stress.
- To know the socio and economic objectives of the employees.

LIMITATIONS OF THE STUDY

- This study has also some limitations and they must be acknowledged.
- The major limitations of the study are that respondents' bias cannot be judged and the sample size.
- Because, the study confined to in and around Coimbatore only and hence the result cannot be final key.
- Due to time constrains, the number of respondents taken for the study is limited to 150.
- The study has been done within a period of 3 months.
- Sometimes the consumer may not be genuine in their answer.

REVIEW OF LITERATURE

- Charu M. (2013) - He in his study stated that higher stress is directly proportional to quality of work life for IT professionals. He outlined few factors namely fair pay structure, steady role

Company. Thus, the scope of the study has been designed to know the stress of employees working in the private sector. The study also tries to find out the consequences of stress on productivity of employees and also it attempts to find out to know the role of organization to remove the stress among the IT employees.

demands, supervisory support, congenial job environment, capability fit of the job, role autonomy and stress that directly affect the quality of work life. The main reason of stress amongst the associates of IT industry is the rapid change in technology.

- P.S. Swaminathan, & Rajkumar S. (2013)- He conducted a study that focused on the levels of stress among the age group, profession, different varieties of jobs, hours of work and the influence of work environment on the degree of stress faced by employees. Stress in an employee is very individual in nature. His study indicates about an optimum level in which every individual can perform with his full capacity. He has identified three conditions responsible for work stress they are a) Role overload b) Role self-distance c) Role stagnation.
- Karthik R. (2013)- Employee's performance at work is in-fluenced by stress that can be either positive or negative. The employee performs better if they face low to moderate amount of stress. Hence, it aims at reducing the level of stress rather than eliminating stress completely.

Tools For Analysis

The tools used for analysis are

- Simple percentage analysis.
- Chi-square test
- Simple average
- Weighted average
- Rank analysis

**Frequency Table
Simple percentage****OCCUPATIONAL STATUS?**

S.NO	OCCUPATIONAL STATUS	NO.OF. RESPONDENT	PERCENTAGE (%)
1	STUDENT	24	16
2	EMPLOYEE	61	40.7
3	PROFESSIONAL	58	38.7
4	OTHERS	7	4.7
	TOTAL	150	100

It is observed from the above table that 40.7% of the respondents are employee, 38.7% of the respondents are professional, 16% of the respondent is students, 4.7% of the respondent is others.

Majority 40.7% of the respondents are employee.

NATURE OF WORK?

S.NO	WHAT IS THE NATURE OF YOUR WORK?	NO.OF. RESPONDENT	PERCENTAGE (%)
1	SKILLED LABOR	43	28.7
2	TECHNICAL	59	39.3
3	SERVICE	27	18
4	OTHERS	21	14
	TOTAL	150	100

It is observed from the above table that 39.3% of the respondents are technical, 28.7% of the respondents are skilled labor, 18% of the respondents are service, 14% of the respondent is others.

Majority 39.3% of the respondents are technical.

Simple Average:**HANDLING WORK LOAD?**

S.NO	ACCORDING TO YOU WHAT IS THE BEAT WAY TO HANDLE WORK LOAD?	NO.OF. RESPONDENT	SIMPLE AVERAGE
1	GET HELP	16	0.10
2	THINK POSITIVE	76	0.50
3	LEARN TO SAY NO	22	0.14
4	PRIORITIZE WORK	36	0.24
	TOTAL	150	0.98

It is observed from the above table that 0.50- of the respondents says think positive, 0.24- of the respondents says prioritize work, 0.14 – learn to say no, 0.10 – says get help.

Majority 0.50- of the respondents says think positive.

**Rank Analysis****CONTROLLING THE STRESS.**

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL SCORE	RANKING
COUNSELING	61 305	25 100	28 56	15 30	21 21	150 512	I
LEISURE BREAK	23 115	47 188	28 56	33 66	19 19	150 444	V
SPORTS ACTIVITIES	34 170	29 116	39 117	25 50	23 23	150 476	III
RECOGNIZING GOOD WORK	24 120	32 128	38 114	31 62	25 25	150 449	IV
JOB ROTATION/ INFORMAL RELATIONSHIP	39 195	34 136	26 78	23 46	28 28	150 483	II

From this ranking analysis, it is found that counseling (Rank-1), which comes next followed by job rotation/informal relationship (Rank-2), sports activities (Rank-3), recognizing good work (Rank-4), leisure break (Rank-5).

Majority of the respondent behavior towards counseling as the major factor in controlling the stress.

Weighted Average**LEVEL OF SATISFACTION**

FACTORS	STRONGLY AGREE (4)	AGREE (3)	NEUTRAL (2)	DISAGREE (1)	TOTAL SCORE	MEAN SCORE
HAVING VERY LONG WORKING HOURS	35 140	65 195	36 72	14 14	150 421	2.806
HAVING TOO MUCH OF WORK ALLOTTED TO ME	32 128	55 165	46 92	17 17	150 402	2.68
LACK OF CONTROL OVER THE WORK ASSIGNED TO ME	23 92	47 141	49 98	31 31	150 362	2.413
GIVING UNREALISTIC TARGETS TO ACHIEVE	27 108	44 132	42 84	37 37	150 361	2.406

It is observed from the above table that 2.806- of the respondents says having very long working hours, 2.68- of the respondents says having too much work allotted to me, 2.413 – of the respondents says lack of control over the work assigned to me, 2.406 – of the respondents says giving unrealistic targets to achieve.

The above table shows the level of relation to the stress of the employees. The highest mean score is 2.806 for having very long working hours.

CHI SQUARE Analysis

Chi- square test - Comparison between MONTHLY INCOME AND JOB DESIGNATION.

H₀ = There is no association between monthly income and job designation.

H₁ = There is an association between monthly income and job designation.

Factors	Calculation Value	Df	Table Value	Remarks
Income	12.672 ^a	9	16.92	Accepted



It is clear from the above table that, the calculated value of chi-square is less than the table value. Hence the hypothesis is accepted. So, there is no significant relationship between income and job designation of respondents.

FINDINGS, SUGGESTIONS AND CONCLUSION

Finding of The Study

Simple Percentage Analysis

- Majority 60% of the respondents are belonging to 20-30 years.
- Majority 80% of the respondents are unmarried.
- Majority 36.7% of the respondents are belonging to urban area.
- Majority 54% of the respondents are below 4 members in the family.
- Majority 60% of the respondents are UG graduate.
- Majority 44% of the respondents are getting income between 20,000-30,000.
- Majority 40.7% of the respondents are employee.
- Majority 39.3% of the respondents are technical.
- Majority 38.7% of the respondents are working less than one year.
- Majority 31.1% of the respondents are normal employee.
- Majority 64.7% of the respondent's factors is belonging to yes.

Simple Average Analysis

- Majority 0.50- of the respondents says think positive.
- Majority 0.45- of the respondents says once in a while.
- Majority 0.30- of the respondents says flexible work hours.
- Majority 0.33- of the respondents says sometimes.
- Majority 0.33- of the respondents says sometimes.

Rank Analysis

- Majority of the respondent behavior towards counseling as the major factor in controlling the stress.

- Majority of the respondent behavior towards over work load as the major factor in causing the stress.

Weighted Average Analysis

- The above table shows the level of relation to the stress of the employees. The highest mean score is 2.806 for having very long working hours.

Chi-Square Analysis

- There is no significant between nature of the work of the respondents and job stress.
- There is no significant between income of the respondents and job designation.

SUGGESTIONS

- The employees must give importance to time management techniques thereby they can complete their work within the specified time.
- Many tasks can be delegated to subordinates without losing effectiveness so that we can reduce the overload of work.
- Giving counseling to the employees when they face problems, because counseling is the discussion of a problem that usually has emotional content with an employee in order to help the employee cope within better.
- The organization can introduce Employee Assistance Programs (EAPs) and stress control workshops accordingly to the level of employees.

CONCLUSION

In the age of dynamic and the competitive world, the mankind has exposed to most of, all kind of stresses as the stress has been found in the entire sector. This research study was aimed at to study the impact of employee's stress at their work place. This study suggests that the working employee in private sector is more affected due to work load, lack of job control, and in particular job insecurity. Thus, the effectiveness of stress management among the employee in and around Coimbatore is surveyed using questionnaire method and the data collected are analyzed and the solutions and recommendations suggested by the employee are enlisted above.



WEBSITE

1. www.stress.org
2. www.researchgate.net
3. www.scribd.com
4. www.ibef.org



DEVELOPMENT OF VORICONAZOLE MICROSPONGE BASED TOPICAL DELIVERY FORMULATION

**Kadari Supraja, Suryapally Pooja, Muddam Mahalakshmi,
Bathini Yashwitha**

St. Peter's Institute of Pharmaceutical Science, Hanmakonda, Warangal, Telangana, India.

ABSTRACT

Carrier technology offers an intelligent approach for drug delivery by coupling the drug to a carrier particle such as microspheres, nanoparticles, etc. to control the delivery rate of active agents to a predetermined site in human body. The study aimed towards formulation development and evaluation of polymeric micro sponges consisting of noncollapsible structures with porous surface through which active ingredients are released in a controlled manner

Preparation of Voriconazole microsponges is done by quasi emulsion solvent diffusion method followed by preparation of microsp sponge Voriconazole gel. Characterization of Voriconazole microsponges is done by various physical parameters e.g. Particle size (Microscopy), Morphology and Surface topography, Characterization of pore structure, Loading efficiency and production yield, Drug content, Compatibility studies, Resiliency as well as by In vitro drug release studies e.g. drug release study, release kinetics, In vitro anti-microbial study etc. This system has been utilized for the improvement of performance of topically applied drug. MDS technology is now being presently used in cosmetics, over-the-counter (OTC) skin care, sunscreens and prescription products.

KEYWORDS: Polymeric Microsponges (PMS), Voriconazole, Microsponges delivery systems (MDS),

INTRODUCTION^[1-3]

Today more and more developments in delivery systems are being integrated to optimize the efficacy and cost effectiveness of the therapy. Carrier technology offers an intelligent approach for drug delivery by coupling the drug to a carrier particle such as microspheres, nanoparticles, and liposome etc. To control the delivery rate of active agents to a predetermined site in human body has been one of the biggest challenges faced by drug industry. The Micro sponge delivery system fulfils these requirements. Microsponges consisting of noncollapsible structures with porous surface through which active ingredients are released in a controlled manner. Microsp sponge polymers possess the versatility to load a wide range of actives providing the benefits of enhanced product efficacy. To avoid cosmetic problems; not more than 10 to 12% w/w microsponges must be incorporated into the vehicle. Polymer design and payload of the microsponges for the active must be optimized for required release rate for given time period. MDS technology is now being presently used in cosmetics, over-the-counter (OTC) skin care, sunscreens and prescription products. MDS is ideal for skin and personal care products. They can absorb large amounts of excess of skin oil, while retaining an elegant feel on the skin's surface. The technology is currently employed in almost number of products sold by major cosmetic and toiletry companies worldwide.

MATERIALS AND METHODS

METHODOLOGY PREFORMULATION STUDY^[09-18]

Organoleptic Properties

- a. **Colour:** A small quantity of the drug was taken on butter paper and viewed in well- illuminated place.
- b. **Taste and odour:** Very less quantity of the drug was used to get taste with the help of tongue as well as smelled to get the odour.



Melting Point

Melting point of Voriconazole was determined by capillary method using Melting point apparatus. Here, the capillary tube was filled by pressing the open end gently into Voriconazole (pure drug) sample by tapping the bottom of the capillary on a hard surface so that the drug pack down into the bottom of the tube. When the drug packed into the bottom of the tube, the tube was placed into the slot. Make sure the unit is plugged in and set to zero, and then turn it on. The temperature were noted when the drug start to melt and the drug till complete melt.

Solubility profile

The sample was qualitatively tested for its solubility in various solvents. It was determined by shaking 10.0 mg of drug sample in 10.0 ml of different solvents in small bottle with the help of mechanical shaker for 30 min and the time required to disappear the sample completely was recorded.

Partition Coefficient: The partition coefficient of Voriconazole was determined by shaking flask method in n-octanol: Phosphate buffer 7.4. 10 mg of drug Voriconazole was added into 50 ml each of n-octanol and Phosphate buffer 7.4. The mixture was shaken for 24 hours until equilibrium was reached. Phases were separated in a separating funnel and the aqueous phase was filtered through 0.2 μ filter, suitably diluted and amount of Voriconazole in aqueous phase was determined by measuring the absorbance at 225 nm using UV spectrophotometer. The partition coefficient ($P_{o/w}$) of Voriconazole was calculated from the ratio between the concentration of Voriconazole in organic (C_{oil}) and aqueous phase ($C_{aq.}$) using following equation. $P_{o/w} = (C_{oil}/C_{aq.})$ equilibrium

Ultraviolet Absorbance spectra STANDARD GRAPH OF Voriconazole

A precise, sensitive and accurate method for estimating Voriconazole was developed using UV visible spectrophotometer

Preparation of pH 7.4 Phosphate Buffer

Placed 50.0 ml of 0.2 M potassium dihydrogen phosphate in a 200ml volumetric flask, added the specified volume of 39.1 ml of 0.2 M sodium hydroxide and then added water to make up the volume.

0.2M Potassium dihydrogen phosphate: Dissolved 27.218 gm of potassium dihydrogen phosphate in distilled water and diluted with distilled water to 1000ml.

0.2M sodium hydroxide solution: Dissolved 8 gm of sodium hydroxide in distilled water and diluted with distilled water to 1000ml.

Procedure for UV spectroscopic method

The drug Voriconazole was solubilized in negligible amount of methanol and volume was made up by pH 7.4 Phosphate Buffer. A concentration of 10 μ g/ml was prepared and the absorption maximum (λ -max) was determined by scanning the drug solution within the range of 200 nm to 400 nm using a UV- Visible Spectrophotometer. The drug exhibited a λ -max at 225nm.

Preparation of Standard Solution

50 mg of the drug was accurately weighed into a 50 ml volumetric flask, which was dissolved in negligible amount of methanol and made up to the mark using pH 7.4 Phosphate Buffer to get 1000 μ g/ml solution and was used as a standard stock solution (SS).

Working Standard I

From SS 5ml was pipette out into another 50 ml volumetric flask and was further diluted up to the mark with pH 7.4 Phosphate Buffer to get in 100 μ g/ml solution (WS1) and was used to prepare further dilutions.

Working Standard II

From WS-I, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5 and 4.0ml was pipette out into separate 25ml volumetric flask and was diluted to the mark with pH 7.4 Phosphate Buffer to get a concentration range of 2 to 16 μ g/ml. These solutions were scanned and the absorbance was measured at 225nm against blank (pH 7.4 Phosphate Buffer: methanol=4:1). The absorbance values thus obtained were plotted against the respective concentration to obtain the standard calibration graph. The procedure was repeated three times and the average values of absorbance were calculated. The data obtained was statistically evaluated to obtain the standard



deviation of the said values and regression coefficients were calculated and the results are shown in Table.

Interference of Additives/Compatibility Testing

A 100 mg quantity Voriconazole was weighted and solubilized in negligible amount of methanol and volume was made up by pH 7.4 Phosphate Buffer (100 ml). Similarly 150 mg of powder blend containing 100 mg drug and 50 mg of polymer (Eudragit S 100) was dissolved in the respective solutions as above. Similarly 50 mg of polymer blend containing no drug (placebo) were dissolved in the respective solutions. All flasks were kept for 45 minutes in ultrasonic bath. Later solutions were filtered. Filtered solutions were diluted 100 times and the absorbances were measured at corresponding wavelength to verify the interference of additives.

Preparation of micro sponges

Voriconazole Microsponges were prepared by quasi-emulsion solvent diffusion method. To prepare the internal phase, Voriconazole was dissolved in 10 ml of dichloromethane: ethanol (1:1) mixture to dissolve both the drug and the polymer (Eudragit S 100) and to this add 20% by weight dibutyl phthalate as a plasticizer. The external phase containing 200 ml of 1% (w/v) PVA in water. The external phase was placed in the vessel with propeller stirrer rotating at 600 rpm, to this add slowly internal phase. The system was thermally controlled at 25^o C in a water bath. Agitations up to 30 min permit the formation of microsponges and continue stirring for 8h to get desired rigid microsponges. After 8h stop stirring filter the rigid micro sponges through the filter paper (Whatmann filter paper 0.45 µm), washed with distilled water and dried at room temperature.

Voriconazole microsponges were prepared using various drug: polymer ratios i.e. 1:1, 1:1.25, 1:1.5, 1:7.5,1:2 keeping stirring rate of 600 rpm constant, The formula of various microspoon are shown in table.

Table 2: Micro sponge Formulations (Both Internal & external phase) INTERNAL PHASE

Formulation					
Ingredients	F1	F2	F3	F4	F5
Voriconazole (%w/v)	2%	2%	2%	2%	2%
Drug: Polymer	1:1	1:1.25	1:1.5	1:7.5	1:2
DCM (ml)	5	5	5	5	5
Ethanol (ml)	5	5	5	5	5
Di butyl phthalate (ml)	0.5	0.5	0.5	0.5	0.5

Table 3: EXTERNAL PHASE

Formulation						
Ingredients	F1	F2	F3	F4	F5	F6
PVA (mg)	100	100	100	100	100	100
Water (ml)	200	200	200	200	200	200

Characterization of Microsponges

Production/Percentage yield: The dried microsponges of each batch are weighed separately and percentage yield is calculated by using following equation:-

$$\text{Percentage yield} = \frac{\text{Practical weight}}{\text{Theoretical weight}} \times 100$$

Entrapment efficiency (EE)/Loading efficiency (%): 100 mg of microsponges were accurately weighed. They were powdered and extracted with 100 ml of methanol. Further it was serially diluted with pH 7.4 phosphate buffers. The resulting solution was analyzed for Voriconazole drug content by measuring absorbance in a UV-spectrophotometer at 225 nm using pH 7.4 phosphate buffer as blank. The studies were carried out in triplicate. The actual drug content and EE were calculated as given below:



- Actual drug content (%) = $(M_{act}/M_{ms}) \times 100$
- Entrapment efficiency(%) = $(M_{act}/M_{the}) \times 100$

Where M_{act} is the actual amount of Voriconazole in weighed quantity of microsponges, M_{ms} is the weighed quantity of microsponges, and M_{the} is the theoretical amount of Voriconazole in microsponges.

Scanning Electron Microscopy

Scanning electron microscopy (SEM) is an electron optical imaging technique that provides photographic images and elemental information. SEM is useful for characterizing the morphology and size of microscopic specimens with particle size as low as nano meter to deca meter. The sample is placed in an evacuated chamber and scanned in a controlled pattern by an electron beam. Interaction of the electron beam with the specimen produces a variety of physical phenomena that, when detected, are used to form images and provide elemental information about the specimens. Micro sponges were fixed on aluminum studs and coated with gold using a sputter coater SC 502, under Vacuum [0.1 mm Hg]. The Microsponges were then analyzed by scanning electron microscopy (SEM) [Model JSM-840 A, Joel. Japan].

In Vitro dissolution studies: The release of Voriconazole from microspunge was investigated in pH 7.4 phosphate buffer as a dissolution medium (900 ml) using USP type I apparatus. A sample of microspunge equivalent to 100 mg of Voriconazole was taken in the basket. A speed of 50 rpm and temperature of $37 \pm 0.5^\circ \text{C}$ was maintained throughout the experiment. At fixed intervals, aliquots (5 ml) was withdrawn and replaced with fresh dissolution media. The concentration of drug released at different time intervals was then determined by measuring the absorbance using Double beam UV spectrophotometer at 225 nm against blank. The studies were carried out in triplicate.

Preparation of optimized microspunge gels

Dissolve accurately weighed quantity of carbopol 934 in 10ml distilled water to this add solvent blend comprising of methanol: PEG 400 which is previously contained 100mg of optimized microspunge with constant stirring. To the whole mixture add drop wise triethanolamine until transparent gel was obtained. Stirring was stopped to escape entrapped air; further formed gel was stored in a air tight container for further study.

Table 4: Microspunge Incorporated Gel Formulations

S.No.	Ingredients	F-3 Gel
1	Optimized microspunge (mg) (equivalent to 100mg of (Voriconazole)	117
2	Carbopol 934 (mg)	100
3	Distilled water (ml)	10
4	Methanol (ml)	2
5	Poly ethylene glycol	2 drops
6	Tri ethanol amine	4-5 drops

In Vitro diffusion studies: The release of Voriconazole from optimized microspunge gels were determined using membrane diffusion technique. The microspunge gels equivalent to 100 mg of Voriconazole was used for the diffusion study. The gel was taken in a glass tube having a diameter 2.5 cm with an effective length of 8 cm that was previously covered with soaked osmosis cellulose membrane, which acts as a donor compartment. The glass tube was placed in a beaker containing 100 ml of phosphate buffer pH 7.4, which acts as receptor compartment. The whole assembly was fixed in such a way that the lower end of the tube containing gel was just touched (1-2mm deep) the surface of diffusion medium. The temperature of receptor medium maintained at $37 \pm 100^\circ \text{C}$ and the medium was agitated at 100 rpm speed using magnetic stirrer. Aliquots of 5ml sample were withdrawn periodically and after each withdrawal same volume of medium was replaced. The collected samples were analysed at 225 nm in Double beam UV-VIS spectrophotometer using phosphate buffer 7.4 as blank.



Kinetic Modeling

Data obtained from in-vitro release studied was evaluated to check the goodness of fit to various kinetics equations for quantifying the phenomena controlling the release from microspheres. The kinetic models used were zero order, first order, and Higuchi and Korsmeyer-peppas model. The goodness of fit was evaluated using the correlation coefficient values (R^2).

The results of in-vitro release profile obtained for all the formulations were plotted in kinetic models as follows,

1. Cumulative of drug released versus time (zero order kinetic model).
2. Log cumulative percent drug remaining to be absorbed versus time (First order model)
3. Cumulative amount of drug release versus square root of time (Higuchi model)
4. Log cumulative drug released versus log time (Korsmeyer-Peppas model)

Zero Order Kinetics: It describes the system in which the drug release rate is independent of its concentration.

$$Q_t = Q_o + K_o t \quad (1)$$

Where

Q_t = Amount of drug dissolved in time t

Q_{os} = Initial amount of drug in the solution, which is often zero and K_o = zero order release constant.

If the zero order drug release kinetic is obeyed, then a plot of Q_t versus t will give a straight line with a slope of K_o and an intercept at zero.

First Order Kinetics

It describes the drug release from the systems in which the release rate is concentration Dependent.

$$\log Q_t = \log Q_o + kt/ 2.303 \quad (2)$$

Where

Q_t = amount of drug released in time t.

Q_o = initial amount of drug in the solution k = first order release constant

If the first order drug release kinetic is obeyed, then a plot of $\log (Q_o - Q_t)$ versus t will be straight line.

With a slope of $kt/ 2.303$ and an intercept at $t=0$ of $\log Q_o$

Higuchi Model

It describes the fraction of drug release from a matrix is proportional to square root of time.

$$M_t / M_\infty = kt^{1/2} \quad (3)$$

Where

M_t and M_∞ are cumulative amounts of drug release at time t and infinite time,

and k = Higuchi dissolution constant reflection formulation characteristics. If the Higuchi model of drug release (i.e. Fickian diffusion) is obeyed, then a plot of M_t / M_∞ versus $t^{1/2}$ will be straight line with slope of k .

Korsmeyer-Peppas model (Power Law)

The power law describes the drug release from the polymeric system in which release deviates from Fickian diffusion, as expressed in following equation.

$$M_t / M_\infty = kt^n \quad (4)$$

$$\log [M_t / M_\infty] = \log k + n \log t \quad (5)$$

Where M_t and M_∞ are cumulative amounts of drug release at time t and infinite time (i.e. fraction of drug release at time t),

k = constant incorporating structural and geometrical characteristics of CR device,

n = diffusion release exponent indicative of the mechanism of drug release for drug Dissolution.

To characterize the release mechanism,

The dissolution data $\{M_t / M_\infty < 0.6\}$ are evaluated.

A plot of $\log \{M_t / M_\infty\}$ versus $\log t$ will be linear with slope of n and intercept gives the value of $\log k$. Antilog of $\log k$ gives the value of k .

**Table 1 5: Interpretation of diffusion release mechanisms**

n	Mechanism
0.45	Fickian diffusion
0.45 < n < 0.89	Anomalous(Non-Fickian) diffusion
0.89	case II transport
Above 0.89	Super case II transport

Skin Irritation Study

Albino Rabbits (2-2.5kg) of either sex were used for testing of skin irritation. The animals were maintained on standard animal feed and had free access to water. The animals were kept under standard conditions. Hair was shaved from back of rabbits and area of 4cm² was marked on both the sides. One side served as control while the other side was test. Prepared optimized microsp sponge gel was applied (500 mg/rabbits) twice a day for 7 days and the site was observed for any sensitivity and reaction if any, was graded as 0, 1, 2, 3 for no reaction, slightly patchy erythema, slightly but conflict or moderate patchy erythema, severe erythema with or without edema respectively.

RESULT AND DISCUSSION**Organoleptic Properties**

The sample drug Voriconazole was found to be white crystalline through visual inspection which is in accordance with I.P

Table 6

TEST	Specification/limits	Observations
Color	white, crystalline powder	white, crystalline powder
Taste	Tasteless	Tasteless
Odour	odourless	Odourless

Solubility Profile

The solubility of Voriconazole was determined in different solvents. The drug was found to be more soluble in organic solvents.

Table 7

S.No.	Solvent	Solubility
1	Dichloromethane	Freely Soluble
2	Chloroform	Soluble
3	Methanol	Soluble
4	Ethanol (95%)	sparingly soluble
5	Water	Practically insoluble
6	Ether	Slightly soluble

Melting Point

Melting point of the sample drug Voriconazole was found to be 151 °C which is in accordance with IP.

Table 8

Test	Specification /limit	Observation
Melting point	148-152°C	151°C

***the study conducted in triplicate Partition Coefficient**

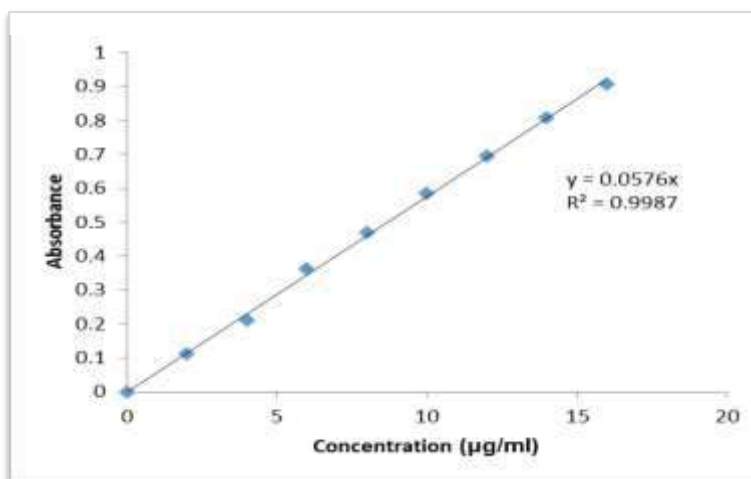
The partition coefficient of Voriconazole was determined in n-octanol: distilled water and log P value was found to be 4.2

**Table 9**

Test	Specification / limits	Observations
Partition Coefficient	n-Octanol: distilled water	4.2

*the study conducted in triplicate Ultraviolet absorbance spectra

STANDARD CURVE OF Voriconazole IN PHOSPHATE BUFFER pH 7.4

Graph-1

Interference of Additives/Compatibility Testing

The results of UV spectroscopic analysis indicated that there was no chemical interaction between the drug and the additives as the physical mixture of polymers and drug exhibited absorption nearly similar to those of the pure drug sample. seen in Table -19.

Table 10

Formulations	Absorbance of solutions			Interference Yes / No
	Polymer blend with drug	Placebo	Pure drug	
F1	0.586	0.003	0.585	No
F2	0.585	0.001	0.585	No
F3	0.586	0.004	0.585	No
F4	0.584	0.003	0.585	No
F5	0.586	0.004	0.585	No

Preparation of Voriconazole microsponges by quasi-emulsion solvent diffusion method:

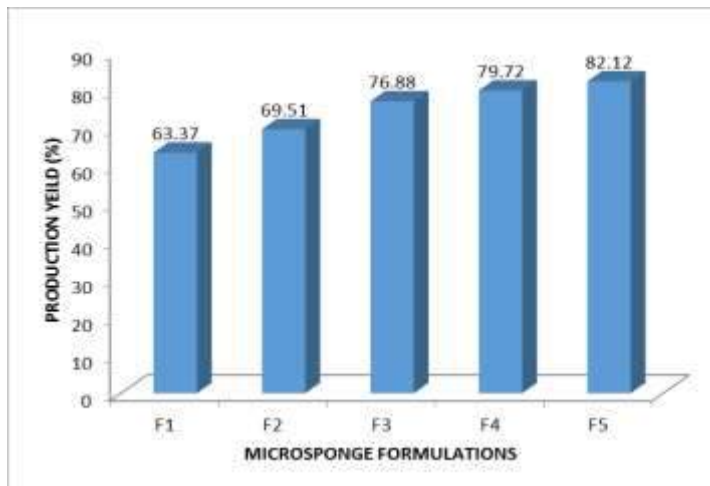
Free flowing powder particles of Voriconazole Microsponge Delivery System were also obtained by quasi-emulsion solvent diffusion method with Eudragit S100 in dichloromethane: ethanol (1:1) mixture. In quasi-emulsion solvent diffusion method, the formation of the microsponges could be by the rapid diffusion of dichloromethane (good solvent for the polymer and drug) into the aqueous medium, might reduce the solubility of the polymer in the droplets, since the polymer was insoluble in water. The instant mixing of the dichloromethane and water at the interface of the droplets induced precipitation of the polymer, thus forming a shell enclosing the dichloromethane and the drug. The finely dispersed droplets of the polymer solution of the drug were solidified in the aqueous phase via diffusion of the solvent.

The method seems to be promising for the preparation of Voriconazole microsponges with being easy, reproducible, rapid method. Microsponges using drug:Eudragit ratio 1:1.5 (F3) was further investigated for drug release after entrapment in carbopol 934 gels. The formulation F3 was chosen as the optimized formulation for drug release because of its highest entrapment efficiency.



Characterization of microsponges Production/Percentage yield (%)

The production yield of Voriconazole microsp sponge formulations are given in Table 20. Production yield calculated for all microsponges ranged from 63.37 to 82.12. The readings are mean of three different measurements ±SD. It was found that production yield increases with increase in drug: polymer ratio.



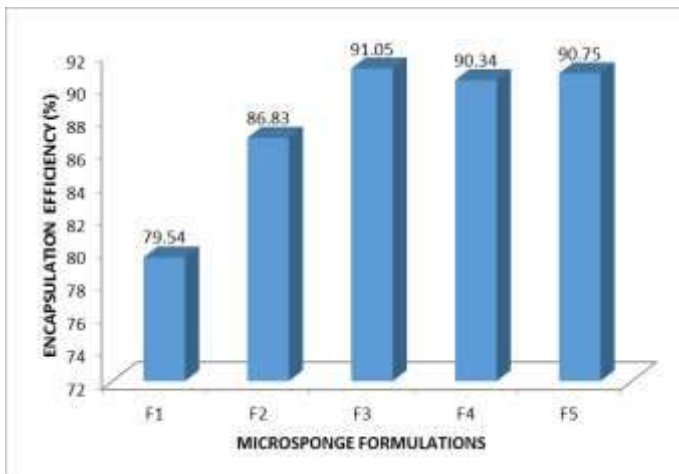
Graph-2: Production/Percentage yield (%):

Encapsulation efficiency/Loading efficiency (%)

The loading efficiency of Voriconazole microsp sponge formulations are given in Table 21. The loading efficiency calculated for all microsponges ranged from 79.54 to 91.05%. The highest loading efficiency was found for the formulation F3 where a greater amount of drug was encapsulated. The highest loading efficiency, greater the amount of drug was encapsulated. It is indicated that Voriconazole /Eudragit S 100 ratio (1:1.5) had the optimum capacity for drug entrapment. With further increase in drug/polymer ratio from 1:1.5 to 1:2, no significant change in loading efficiency was observed.

Table 11: Encapsulation efficiency/Loading efficiency (%)

Formulation	Drug: Polymer Ratio	Theoretical drug content (%)	Actual drug content (%)	Encapsulation Efficiency (%)
F1	1:1	50	39.77	79.54
F2	1:1.25	44.44	38.59	86.83
F3	1:1.5	40	36.42	91.05
F4	1:1.75	36.36	32.85	90.34
F5	1:2	33.33	30.25	90.75



Graph 3: Encapsulation efficiency/Loading efficiency (%): Scanning electron microscopy



The SEM photographs of the microsponges are shown in Fig. SEM images showed the microsponges are porous and spherical in shape. No intact drug crystals are seen visually and inner structure was porous in nature with void spaces. The pores were induced by the diffusion of the solvent from the surface of the microsponges.

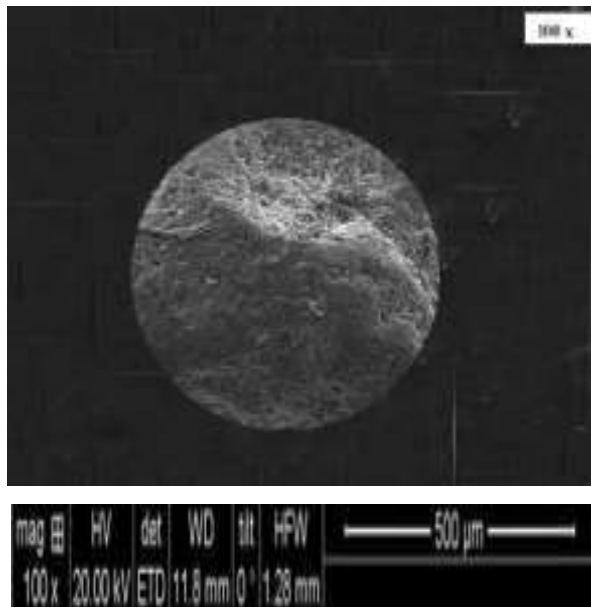


Figure 1: SEM photograph of F-3 microsp sponge formulation

In vitro dissolution studies

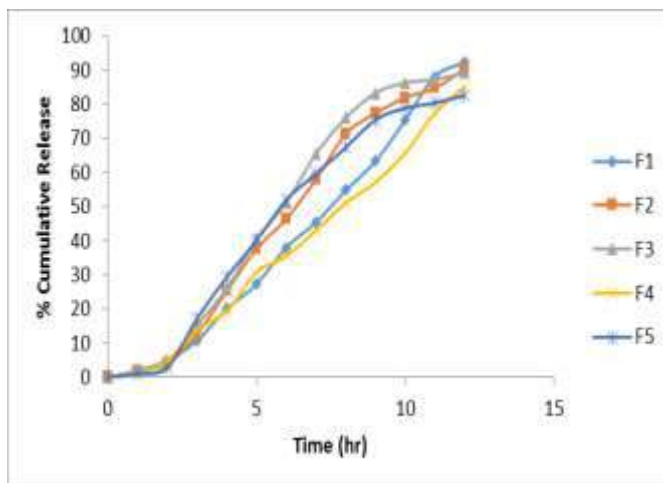
It was observed as the concentration of eudragit was increased, the percent release of ketokonazole decreases. The increase in eudragit concentration leads to the increased density of polymer matrix into the microsponges which result in an increased diffusional path length. This may decrease the overall drug release from polymer matrix.

Drug Release Kinetics of Voriconazole Microsp sponge Zero order release kinetics

Table 12: Zero order release kinetic data of Voriconazole Microsp sponge

Time (hr)	% Cumulative Release				
	F1	F2	F3	F4	F5
0	0.0	0.0	0.0	0.0	0.0
1	02.02 ± 0.14	1.92 ± 0.13	1.94 ± 0.08	01.09 ± 0.08	01.03 ± 0.10
2	04.93 ± 0.03	3.95 ± 0.17	4.96 ± 0.09	04.86 ± 0.08	02.97 ± 0.02
3	10.84 ± 0.09	12.84 ± 0.16	15.42 ± 1.06	13.82 ± 0.07	17.33 ± 0.48
4	20.08 ± 0.45	25.34 ± 2.38	26.14 ± 1.11	19.52 ± 0.93	29.44 ± 0.42
5	27.35 ± 0.66	37.69 ± 1.62	40.54 ± 1.05	30.75 ± 0.91	40.16 ± 0.45
6	38.06 ± 0.77	46.50 ± 1.05	51.25 ± 0.66	35.60 ± 1.32	52.00 ± 0.42
7	45.43 ± 1.33	58.01 ± 0.55	65.56 ± 1.00	43.14 ± 0.57	59.64 ± 0.80
8	54.80 ± 0.74	71.34 ± 0.56	76.00 ± 1.17	51.07 ± 1.95	67.38 ± 0.42
9	63.33 ± 0.70	77.35 ± 0.49	83.32 ± 1.22	57.19 ± 1.02	75.44 ± 0.82
10	75.39 ± 0.66	81.96 ± 0.35	86.30 ± 1.70	65.70 ± 0.64	78.89 ± 0.79
11	88.13 ± 1.23	84.76 ± 0.53	87.28 ± 1.36	77.40 ± 0.45	80.38 ± 0.96
12	92.26 ± 1.20	90.31 ± 2.11	89.19 ± 1.05	85.11 ± 0.73	82.66 ± 0.95

All the values are expressed as mean ± standard deviation (n=3)

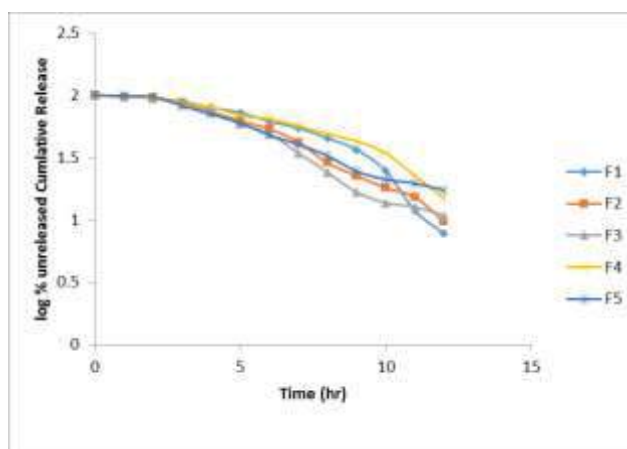


Graph 4: Zero order release kinetics profile of Voriconazole Microsponge

First Order Release Kinetics

Table 13: First order release kinetic data of Voriconazole Micro sponge

Time (hr)	Log % Cumulative drug remain to be Released				
	F1	F2	F3	F4	F5
0	2	2	2	2	2
1	1.9911	1.9915	1.9914	1.9952	1.9955
2	1.9780	1.9824	1.9779	1.9783	1.9869
3	1.9501	1.9403	1.9272	1.9354	1.9173
4	1.9026	1.8730	1.8684	1.9056	1.8485
5	1.8612	1.7945	1.7742	1.8404	1.7769
6	1.7919	1.7283	1.6879	1.8088	1.6812
7	1.7369	1.6231	1.5370	1.7548	1.6059
8	1.6551	1.4572	1.3802	1.6895	1.5134
9	1.5643	1.3550	1.2221	1.6315	1.3902
10	1.3911	1.2562	1.1367	1.5352	1.3244
11	1.0744	1.1829	1.1044	1.3541	1.2926
12	0.8885	0.9863	1.0338	1.1728	1.2390



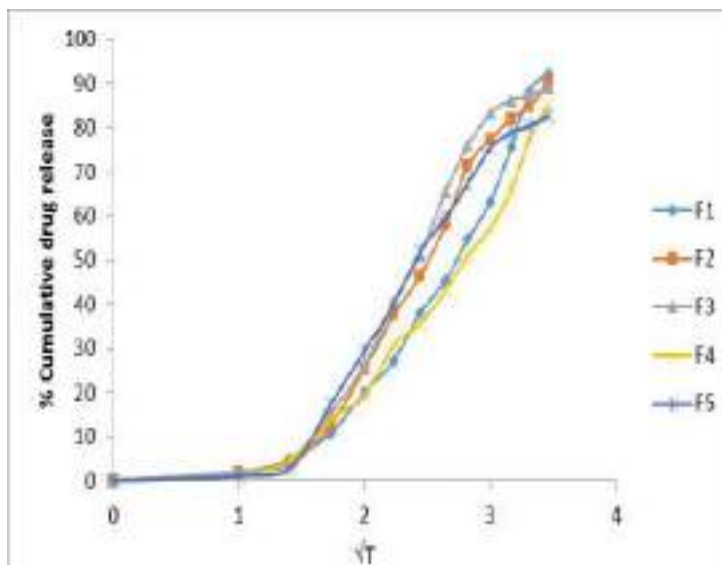
Graph 5: First order release kinetics profile of Voriconazole Micro sponge



Higuchi Release Kinetics

Table 14: Higuchi release kinetic data of Voriconazole Micro sponge

\sqrt{T}	% Cumulative Release				
	F1	F2	F3	F4	F5
0	0.0	0.0	0.0	0.0	0.0
1.00	02.02 ± 0.14	1.92 ± 0.13	1.94 ± 0.08	01.09 ± 0.08	01.03±0.10
1.41	04.93 ±0.03	3.95 ± 0.17	4.96 ± 0.09	04.86 ± 0.08	02.97 ± 0.02
1.73	10.84± 0.09	12.84 ± 0.16	15.42 ± 1.06	13.82 ± 0.07	17.33 ± 0.48
2.00	20.08± 0.45	25.34 ± 2.38	26.14 ±1.11	19.52 ± 0.93	29.44 ± 0.42
2.23	27.35± 0.66	37.69 ± 1.62	40.54 ±1.05	30.75 ± 0.91	40.16 ± 0.45
2.44	38.06± 0.77	46.50 ± 1.05	51.25 ± 0.66	35.60 ± 1.32	52.00 ± 0.42
2.64	45.43 ± 1.33	58.01 ± 0.55	65.56 ± 1.00	43.14 ± 0.57	59.64 ± 0.80
2.82	54.80 ± 0.74	71.34 ± 0.56	76.00 ± 1.17	51.07 ± 1.95	67.38 ± 0.42
3.00	63.33 ± 0.70	77.35 ± 0.49	83.32 ± 1.22	57.19 ± 1.02	75.44 ± 0.82
3.16	75.39 ± 0.66	81.96 ± 0.35	86.30 ± 1.70	65.70 ± 0.64	78.89 ± 0.79
3.31	88.13 ± 1.23	84.76 ± 0.53	87.28 ±1.36	77.40 ± 0.45	80.38 ± 0.96
3.46	92.26 ± 1.20	90.31 ± 2.11	89.19 ± 1.05	85.11 ± 0.73	82.66 ± 0.95



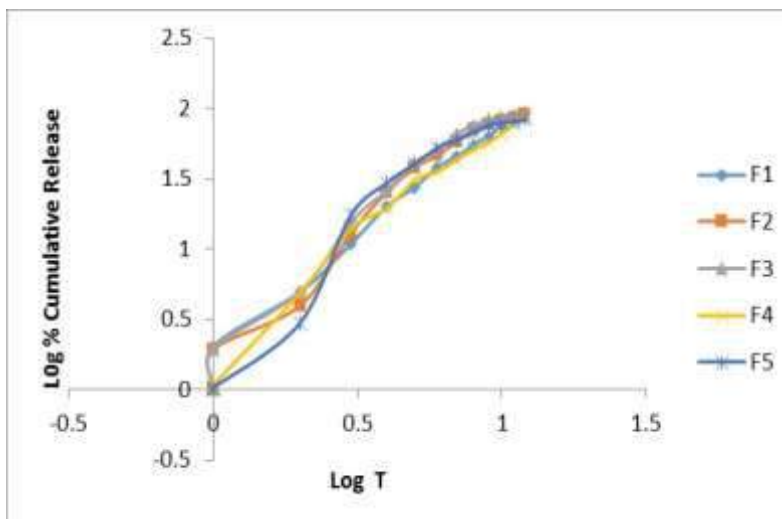
Graph 6: Higuchi release kinetic profile of Voriconazole Micro sponge Peppas release kinetics

Table 15: Peppas release kinetic data of Voriconazole Microsponge

Log T	Log % Cumulative Release				
	F1	F2	F3	F4	F5
0	0.0	0.0	0.0	0.0	0.0
0	0.3053	0.2833	0.2878	0.0300	0.0128
0.301	0.6928	0.5965	0.6954	0.6866	0.4727
0.477	1.0350	1.1085	1.1880	1.1405	1.2387
0.602	1.3027	1.4038	1.4173	1.2904	1.4689
0.698	1.4369	1.5762	1.6078	1.4878	1.6037



0.778	1.5804	1.6674	1.7096	1.5514	1.7160
0.845	1.6573	1.7635	1.8166	1.6348	1.7755
0.903	1.7387	1.8533	1.8808	1.7081	1.8285
0.954	1.8016	1.8884	1.9207	1.7573	1.8776
1.0	1.8773	1.9136	1.9360	1.8175	1.8970
1.041	1.9451	1.9281	1.9409	1.8887	1.9051
1.079	1.9650	1.9557	1.9503	1.9299	1.9172



Graph 7: Peppas release kinetic profile of Voriconazole Microsponge

Kinetic Modeling of Microsponge formulations

In vitro drug release data of all the Microsponge formulations was subjected to goodness of fit test by linear regression analysis according to zero order and first order kinetic equations, Higuchi’s and Korsmeyer–Peppas models to ascertain the mechanism of drug release. The results of linear regression analysis including regression coefficients are summarized in table.

Table 16: Kinetic Modeling of Microsponge formulations

Formulation	Zero order kinetic Data	First order kinetic data	Higuchi Matrix kinetic data	Peppas kinetic data		Best fit model
	Regression coefficient (r ²)	Regression coefficient (r ²)	Regression coefficient (r ²)	Regression coefficient (r ²)	n-value	
F1	0.9899	0.9590	0.9361	0.8751	0.6223	Zero order
F2	0.9761	0.9668	0.9717	0.9679	0.5803	Zero order
F3	0.9555	0.9701	0.9654	0.9668	0.5910	First order
F4	0.9954	0.9047	0.9595	0.7884	0.6129	Zero order
F5	0.9561	0.9877	0.9782	0.9298	0.5114	First order



The results suggest that, the drug was released by mixed order kinetics. The R^2 values of Zero order of the above 5 formulations were in the range of 0.9555 to 0.9954. Similarly the R^2 - Value of first Order were in between 0.9047 to 0.9877 (as shown in table)

Among the 5 formulations some formulations F1, F2 and F4 release the drug by zero order kinetics and some are F3 and F5 release by first order kinetics.

To ascertain, the drug release mechanism the in-vitro release data were also subjected to Higuchi's diffusion equation, the R-values of all the formulations of Higuchi's equations were 0.9361 and above (as shown in table). It suggests that the Higuchi diffusion plots of all the formulations were fairly linear and we can conclude that the drug released by Higuchi's diffusion mechanism.

The formulations are also treated to Peppas plots by taking log percent versus log time. Irrespective of polymer level, the prepared Microsponge formulations showed non-Fickian (anomalous) release, coupled diffusion, and polymer matrix relaxation, $0.5 < n < 0.89$. Thus, it was proposed that these formulations delivered their active compound by coupled diffusion and erosion.

In Vitro diffusion study of optimized microsponge gel formulation

The optimized formulation F3 of microsponge was incorporated into carbopol 934 gels and evaluated for primary skin irritation test and diffusion studies. Summarized in table.

Table 17 In vitro diffusion study of optimized microsponge gel formulation

Time (hrs)	\sqrt{T}	Log T	% CR	Log % CR	% CDR	Log % CDR
0	0	0	0	0	100.0	2.0
1	1	0	01.03	0.0128	98.97	1.9955
2	1.414	0.301	02.97	0.4727	97.03	1.9869
3	1.732	0.477	17.33	1.2387	82.67	1.9173
4	2.0	0.602	29.44	1.4689	70.56	1.8485
5	2.236	0.698	40.16	1.6037	59.84	1.7769
6	2.449	0.778	52.00	1.7160	48.00	1.6812
7	2.645	0.845	59.64	1.7755	40.36	1.6059
8	2.828	0.903	67.38	1.8285	32.62	1.5134
9	3.0	0.954	75.44	1.8776	24.56	1.3902
10	3.162	1.0	78.89	1.8970	21.11	1.3244
11	3.316	1.041	80.38	1.9051	19.62	1.2926
12	3.464	1.079	82.66	1.9172	17.34	1.2390

T = Time, CR = Cumulative release, CDR = Cumulative drug retained

Kinetic Modeling of optimized Microsponge gel formulation

The R^2 values of optimized Micro sponge gel formulation suggests that the drug was released by first order kinetics with non-Fickian (anomalous) release, coupled diffusion, and polymer matrix relaxation, $0.5 < n < 0.89$.

Table 18: Kinetic Modeling of optimized Microsponge gel formulation

Formulation	Zero order kinetic Data	First order kinetic data	Higuchi Matrix kinetic data	Peppas kinetic data		Best fit model
	Regression coefficient (r^2)	Regression coefficient (r^2)	Regression coefficient (r^2)	Regression coefficient (r^2)	n-value	
F3 Gel	0.9451	0.9824	0.9554	0.9769	0.6515	First order



Skin Irritation Study

Skin irritation studies of optimized Microsponge gel formulation shows that there was no sign of erythema or edema after application on rabbits and the results were shown in Table that indicates the prepared optimized Microsponge gel formulation was free from significant skin irritation. summarized in table-19.

Table 19: Results for possible score for skin irritation

TEST	SKIN REACTION	SCORE
Erythema	Very slight erythema	0
	Well defined erythema	0
	Moderate to severe erythema	0
	Severe edema	0
Edema	Very slight erythema	0
	Well defined erythema	0
	Moderate to severe erythema	0
	Severe edema	0

SUMMARY AND CONCLUSION

Delivery via polymer systems has been proposed to be the prevailing in the type of controlled drug delivery devices both in present and future. For scientific as well as economic reasons, such delivery systems have potential advantage which include enhanced therapeutic response, predictable rate of release and extent of absorption, topical retention and improved patient acceptance. In the present work a topical polymeric micro sponge formulation of a locally acting anti fungal agent, Voriconazole was developed using quasi-emulsion solvent diffusion method. The idea behind developing a topical polymeric micro sponge delivery system was to deliver Voriconazole in a sustained release pattern for an extended period of time to reduce frequency of application and improve patient compliance.

Voriconazole (KTZ) is a broad spectrum antifungal agent active against a wide variety of fungi and yeasts. It is readily but incompletely absorbed after oral dosing and is highly variable. Topically it is used in the treatment of candidal or tinea infections of the skin. Encapsulation of KTZ in microsponge gel may increase the half life providing prolonged drug delivery and minimize the commonly occurring side effects.

Production yield and loading efficiency: Production yield and loading efficiency Were calculated for all the micro sponge formulations. Production yield calculated for all micro sponges ranged from 63.37 to 82.12. It was found that production yield increases with increase in the concentration of polymer.

The loading efficiency calculated for all microsponges ranged from 79.54 to 91.05 %. The highest loading efficiency was found for the formulation F3 where a greater amount of drug was encapsulated. The highest loading efficiency, greater the amount of drug was encapsulated. It is indicated that Voriconazole /Eudragit S 100 ratio (1:1.5) had the optimum capacity for drug entrapment. With further increase in drug/polymer ratio from 1:1.5 to 1:2, no significant change in loading efficiency was observed.

Scanning electron microscopy: SEM images showed the micro sponges are porous and spherical in shape.

In vitro dissolution studies: It was observed as the concentration of eudragit was increased, the percent release of Voriconazole decreases. The increase in eudragit concentration leads to the increased density of polymer matrix into the microsponges which result in an increased diffusional path length. This may decrease the overall drug release from polymer matrix. The cumulative % drug release of micro sponge formulation after 12 hrs was found out to be- **F1:92.26, F2: 90.31, F3: 89.19, F4: 85.11, F5: 82 .66.**

Among the 5 formulations some formulations F1, F2 and F4 release the drug by zero order kinetics and some are F3 and F5 release by first order kinetics. To ascertain, the drug release mechanism the in-vitro release data were also subjected to Higuchi's diffusion equation, the R-values of all the formulations of Higuchi's equations were 0.9361 and above. It suggests that the Higuchi diffusion plots of all the formulations were fairly linear and we can conclude that the drug released by Higuchi's diffusion mechanism.

The formulations are also treated to Peppas plots by taking log percent versus log time. Irrespective of



polymer level, the prepared Micro sponge formulations showed non-Fickian (anomalous) release, coupled diffusion, and polymer matrix relaxation, $0.5 < n < 0.89$. Thus, it was proposed that these formulations delivered their active compound by coupled diffusion and erosion.

The R^2 values of optimized Micro sponge gel formulation F3 suggests that the drug was released by first order kinetics with non-Fickian (anomalous) release, coupled diffusion, and polymer matrix relaxation, $0.5 < n < 0.89$.

Skin irritation studies: Skin irritation studies of optimized Microsponge gel formulation shows that there was no sign of erythema or edema after application on rabbits.

REFERENCES

1. Chowdary K.P.R., Rao Y.S. *Mucoadhesive Microspheres for Controlled Drug Delivery*. *Biol.Pharm. Bull.* 2004; 27(11): 1717-24.
2. Nacht S., Kantz M. *The Microsponge: A Novel Topical Programmable Delivery System*. In *Topical Drug Delivery Systems*. Marcel Dekker, New York, 1990; 299–325.
3. Embil K., Nacht S. *The microsponge delivery system (MDS) a topical delivery system with reduced irritancy incorporating multiple triggering mechanisms for the release of actives*. *J Microencapsul*, 1996; 13: 575–88.
4. Chadawar V, Shaji J: *Microsponge delivery system*. *Current Drug Delivery* 2007; 4: 123- 129.
5. D'souza JI, Masvekar RR, Pattekari PP, Pudi SR, More HN: *Microsponging delivery of fluconazole for topical application*. *Indo-Japanese Int. Conference on Adv. Pharm. Res. And Tech* 2004; 76.
6. Aritomi H, Yamasaki Y, Yamada K, Honda H, Koshi M, *Development of sustained release formulation of chlorpheniramine maleate using powder coated microsponges prepared by dry impact blending method*, *J Pharm Sci Tech*, 1996; 56: 49- 56.
7. Kawashima Y., Niwa T., Takeuchi H., Hino T., Itoh Y., Furuyama S. *Control of Prolonged Drug Release and Compression Properties of Ibuprofen Microsponges with Acrylic Polymer, Eudragit RS by changing their Intraparticle Density*. *Chem. Pharm. Bull.* 1992; 40(1): 196-201.
8. Emanuele A.D. and Dinarvand R. *Preparation, characterization and drug release from thermo responsive microspheres*. *Int. J. Pharmaceutics*, 1995; 118: 237-242.
9. Vyas SP, Khar RK: *Targeted and controlled drug delivery- Novel carrier system*. CBS Publication, New Delhi, Edition 1, 2002; 453.
10. Embil K. and Nacht S: *The microsponge delivery system (MDS): a topical delivery system with reduced irritancy incorporating multiple triggering mechanisms for the release of actives*. *J.Microencapsulation* 1996; 308: 124-132.
11. D'souza J.I., Masvekar R.R., Pattekari P.P., Pudi S.R., More H.N. *Microsponging Delivery Of Fluconazole For Topical Application*. *Indo-Japanese International Conference On Advances In Pharmaceutical Research And Technology*, 2004; 76.
12. Elvehgari M, Siahi-Shadbad MR, Azarmi S, Gary P, Martin, Nokhodchi A: *The microsponge delivery system of benzoyl peroxide: Preparation, characterization and release studies*. *International Journal of Pharmaceutics* 2006; 308: 124-132.
13. Amrutiya N, Bajaj A & Madan M: *Development of microsponges for topical delivery of mupirocin*. *AAPS PharmSciTech* 2009; 10(2): 402-409.
14. D'souza JI, Harinath NM: *Topical anti-inflammatory gels of fluocinolone acetonide entrapped in eudragit based microsponge delivery system*. *Research J Pharm and Tech* 2008; 1: 502-506.
15. Grimes PE: *A microsponge formulation of hydroquinone 4% and retinol 0.15% in the treatment of melasma and post inflammatory hyper-pigmentation*. *Cutis, Vitiligo and Pigmentation Institute of Southern California, Los Angeles*, 2004; 74(6): 362-368.
16. Vyas SP, Khar RK, *Targeted and Controlled Drug Delivery-Novel Carrier System: New Delhi, CBS Publication*. 2002; 453.
17. Tansel C, omog̃lu, Nurs, in Gõnu̇l, Tamer Baykara, *Preparation and in vitro evaluation of modified release ketoprofen Microsponges*, *Il Farmaco* 2003; 58: 101- 106.
18. Sato T, Kanke M, Schroeder G, Deluca P: *Porous biodegradable microspheres for controlled drug delivery. I: Assessment of processing conditions and solvent removal techniques*. *Pharm Res.* 1988; 5: 21-30.



IMPACT OF GREEN MARKETING AMONG PUBLIC WITH SPECIAL REFERENCE TO COIMBATORE

Praveen.V

Student , Dr. N.G.P Arts And Science College , Coimbatore

Mr. M.A.Prasad

Assistant Professor (SG), Dr. N.G.P Arts and Science College,Coimbatore-048

ABSTRACT

Green Marketing is a modern concept which evolves in the recent years. Now a days consumers are also becoming more ecological conscious and desirous of purchasing green products. A world wide alert in the environmental degradation has completed today consumer to become more apprehensive about there buying and consumption habits and the effects that these have on the environment. Green marketing also termed as environmental marketing or ecological marketing refers to the marketing of products that are presumed to be environmentally safe. The core idea of this paper is to know about the awareness about green marketing among the general public or consumer. This paper has taken to the present study for analyzing the consumer behavior regarding green marketing in Coimbatore city .

KEYWORDS: *Green Marketing, awareness, environment, purchasing decision, Recycle.*

INTRODUCTION

Green marketing includes all action taken to full fill the needs and requirements of the consumer with minimal disastrous percussions inflicted on the natural environment. In business contest , the terns green products and eco-friendly products are used commonly to describe the products that are produced ways which protect the natural environment by conserving energy /resources and reducing are eliminating the use of toxic agents . Consumers were becoming more ecologically conscious and also in desirous of purchasing green products. In providing an introduction to the thesis, this present a background to the thesis topic describing as to what is green marketing, green buildings and who are green consumers this is followed by the aim behind this research and over view of research objectives as well as an outline of these structure. Thus, green marketing is marketing of products that are presumed to be environmentally safe and gives benefits to consumer.

SCOPE OF THE STUDY

- The development transfer and implantation of eco-friendly technologies , referred to the environmental technologies .
- Environmentally friendly “ is required to be integrated into the corporate culture .
- In order to develop green marketing goods that can appeal to the consumer reasonable affordable prices and environment – friendly products .
- A companies should be aware of there responsibilities towards the environment and the society .
- Intensive research can be done on all industry with respect to green marketing issues .

OBJECTIVES OF THE STUDY

- To study about the awareness level of eco-friendly products among the consumer.



- To study the buying behavior about eco-friendly products.
- To identify the factors influencing the customer to buy the products.
- To find out the level of satisfaction of customer towards eco-friendly products.
- To know the buying pattern of the consumers.

LIMITATIONS OF THE STUDY

- The number of respondents is limit to 150 employees in the study
- The area of the study which covers only in and around annur , where in it cannot be a final key
- The study was done within a short period of three months of time, investigator could not selected a sufficiently a larger sample for the study
- Sometimes ,the opinions , behavior and attitude of the respondence reflected in this study are restricted to the duration of the research and are subject to change with the passage of time.

REVIEW OF LITERATURE

- **Dr . Bhagwan Singh and Sachin Kumar(2015). A study on current status of green marketing in north india “Pacific business review international”**

This projection leads us to think about working on Green marketing. This paper provides a concise framework of what green marketing actually is? Why it is becoming recognized, and which biggest players across the globe are adopting green marketing? This study will be beneficial to those people who are thinking to buy the green and environmental friendly products in North India. People from North India may be in a dilemma

regarding which companies are green in reality? What company they should prefer while preferring green products?

- **Dilip kumar and Dr S.M.Yamuna (2014).Astudy on consumer preference towards green marketing products.**

This research paper brings an edge to introduce term and concept of Environment marketing and Ecological marketing. The study aims to give information why the green marketing is been emerged, and through with media it has been emerged. According to research consumer demographic and socio-economic characters respond positive in purchasing green products moreover, respondents suggested that green products are low priced and eco-friendly. Green products generally use eco-friendly materials and energy-efficient means of production, thereby causing less or no detrimental impact on the environment. The consumers are satisfied by the Eco-friendly products and they suggested that they do not contain harmful elements that might pollute the ecosystem and the production process of which does not result to any toxic by-products or negative externalities. Moreover, they suggested the public to use green products which are usually biodegradable and made from recyclable materials.

Tools For Analysis

The tools used for analysis are

- Simple percentage analysis.
- Chi-square test
- Simple average
- Weighted average
- Rank analysis

**Frequency Table
Simple percentage****AWARE OF GREEN MARKETING?**

S.NO	HOW YOU BECOME AWARE OF GREEN MARKETING?	NO.OF.RESPONDENT	PERCENTAGE
1	TV	34	22.7
2	MAGAZINES	17	11.3
3	FRIENDS	42	28
4	SOCIAL MEDIA	57	38
	TOTAL	150	100

It is observed from the above table that 38% of the respondents are saying social media, 28% of the respondent are saying friends, 22.7% of the respondent

are saying TV, 11.3% of the respondent are saying magazines.

Majority 38% of the respondents are saying social media.

OCCUPATIONAL STATUS?

S.NO	OCCUPATIONAL STATUS	NO.OF.RESPONDENT	PERCENTAGE
1	SELF-EMPLOYED	24	16
2	PRIVATE EMPLOYEE	50	33.3
3	GOVERNMENT EMPLOYEE	48	32
4	PROFESSIONAL	28	18.7
	TOTAL	150	100

It is observed from the above table that 33.3% of the respondents are private employee, 32% of the respondents are government employee, 18.7% of the

respondent are professional , 16% of the respondent are self-employed.

Majority 33.3% of the respondents are private employee.

Simple Average:**IMPORTANT FACTOR?**

S.NO	WHICH FACTOR IS MORE IMPORTANT TO BUY IN GREEN MARKETING?	NO.OF.RESPONDENT	SIMPLE AVERAGE
1	PRICE	22	0.14
2	QUALITY	48	0.32
3	RESULT	50	0.33
4	ALL THE ABOVE	30	0.2
	TOTAL	150	0.99

It is observed from the above table that 0.33- of the respondents says results, 0.32- of the respondents says quality, 0.2 – says all the above, 0.14 – says price .

Majority 0.33- of the respondents says results.

**Rank Analysis****BENEFITS OF GREEN MARKETING**

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL SCORE	RANKING
LESS PRICE	54 270	18 72	32 96	22 44	24 24	150 506	I
ECO-FRIENDLY	28 140	44 176	40 120	27 54	11 11	150 501	II
MORE EFFECTIVE	20 100	26 104	74 222	17 34	13 13	150 473	III
MORE PROFIT	18 90	26 104	48 144	45 90	13 13	150 441	IV
TRUST WORTHY	20 100	18 72	41 123	37 74	34 34	150 403	V

From this ranking analysis, it is found that less price (Rank-1), which comes next followed by Eco-friendly (Rank-2), more effective (Rank-3), more profit (Rank-4), trust worthy (Rank-5).

Majority of the respondent behavior towards less price as the major factor in benefits of green marketing.

Weighted Average**LEVEL OF SATISFACTION**

FACTORS	STRONGLY AGREE(5)	AGREE (4)	NEUTRAL (3)	DISAGREE (2)	STRONGLY DISAGREE (1)	TOTAL SCORE	MEAN SCORE
HAVING KNOWLEDGE ABOUT GREEN MARKETING	92 460	21 84	20 60	4 8	13 13	150 625	4.166
I AM AWARE OF GREEN MARKETING	38 190	66 264	26 78	10 20	10 10	150 562	3.747
SUPPORTING ENVIRONMENT THROUGH GREEN MARKETING	53 265	26 104	54 162	8 16	9 9	150 556	3.707
TRUST WORTHY	37 185	56 224	30 90	18 36	9 9	150 544	3.627
NATURE PRODUCT	49 245	38 152	28 84	10 20	25 25	150 526	3.507

It is observed from the above table that 4.166- of the respondents says having knowledge about green marketing, 3.747- of the respondents says I am aware of green marketing , 3.707 – of the respondents says supporting environment through green marketing , 3.627 – of the respondents says trust worthy, 3.507-of the respondents says nature product.

The above table shows the level of satisfaction towards the green marketing. The highest mean score is that 4.166- of the respondents says having knowledge about green marketing.

**CHI SQUARE Analysis**

Chi- square test - Comparison between
**RESIDENTIAL AREA AND MODES OF
BUYING GREEN PRODUCTS FROM
GREEN MARKETING.**

H0 = There is no association between residential area and job modes of green products from green marketing.

H1 = There is an association between residential area and job modes of green products from green marketing.

Factors	Calculation Value	Df	Table Value	Remarks
Income	6.931 ^a	9	16.92	accepted

It is clear from the above table show that, the calculated value of chi-square is less than the table value. Hence the hypothesis is accepted. So there is no significant relationship between residential area and the modes of buying green products from green marketing.

FINDINGS, SUGGESTIONS AND CONCLUSION**Finding of the Study****Simple Percentage Analysis**

- ✓ Majority 62.7% of the respondents are belonging to 21-30 years.
- ✓ Majority 73.3% of the respondents are belonging to male.
- ✓ Majority 70% of the respondents are unmarried.
- ✓ Majority 55% of the respondents are belonging to urban area.
- ✓ Majority 40% of the respondents are belonging to 4-6 members in the family.
- ✓ Majority 46% of the respondents are getting income between 11,000-20,000.
- ✓ Majority 40% of the respondents are belonging to UG graduate.
- ✓ Majority 33.3% of the respondents are belonging to private employee.
- ✓ Majority 38.7% of the respondents are belonging to service.
- ✓ Majority 38% of the respondents are saying social media.

Simple Average Analysis

- ✓ Majority 0.4 of the respondents saying better results.
- ✓ Majority 0.36 of the respondents are saying high level satisfaction.
- ✓ Majority 0.37 of the respondents are saying retail store.
- ✓ Majority 0.36 of the respondents are saying package.
- ✓ Majority 0.33 of the respondents are saying never.

Rank Analysis

- ✓ Majority of the respondent's behavior towards less price as the major factor in benefits of green marketing.

Weighted Average Analysis

- ✓ The above table shows the level of satisfaction towards the green marketing. The highest mean score is that 4.166 of the respondents says having knowledge about green marketing.

Chi-Square Analysis

- ✓ There is no significant relationship between age of the respondents and platform they aware about.
- ✓ There is no significant relationship between residential area of the respondents and modes of buying green products from green marketing.

Suggestions

- ✓ Environment friendly behavior is far and difficult to attain. Hence environment awareness and attitudes should be created in the minds of consumer during their childhood days itself.
- ✓ It requires rigorous efforts at school level to create an attitude of environment sustainability.
- ✓ Expand the consumer awareness of green products by creating green marketing campaigns or environmental related activities. The companies should try to more focus on the green features of the product in their marketing activities.
- ✓ Even though the price is the attribute that consumer reflect on when making a green purchasing decision. Consumer are less likely to purchase green products for getting a better result.

CONCLUSION

Thus, from the analysis which carried out in this study, we can conclude that the people have awareness about the eco-friendly products and they show a



positive attitude towards green marketing. But we should try to increase the awareness level into another extent. Which means a wide variety of eco-friendly products is available today. But the consumer awareness level limited to organic vegetables and consumable items. Constant efforts should be taken by the government, NGO's, educational institutional, business houses and society at a large to create awareness among the consumer to promote eco-friendly buying behavior through green marketing.

WEBSITES

1. www.ecomall.com
2. www.greenmarketingcorner.com
3. www.greenpeace.org
4. www.greenmarketing.com



EDUCATION FOR ALL IN INDIA: HOW MUCH HAS BEEN COVERED AND HOW MUCH IS LEFT

Seema Agnihotri (Ph.D)

Amity university/Amity Institute of Education, India,

ABSTRACT

Education has always remained very vibrant issue since ages regarding deciding its beneficiaries. Keeping aside the informal education, the formal education since its inception discerned its acute sensitivity to include everyone in the system. The Educational system of the countries with ancient civilizations vindicate this stand when they allowed restricted number to participate in the endeavor based on their cast, class or intellect. This trend due to certain political, social, economic and historical factors continued for centuries unabated. After meeting the devastating consequences of the two world wars within short span of time and subsequent initiation of the decolonization phase might worked as a potent factor for the UNESCO to select education as a fundamental human right in order to create harmonious and peaceful world in the future. Since then, all countries of the world are trying their best to achieve the target of universalization and it got accelerated after the Jomtien Conference of 'Education for all' in 1991 backed up UNESCO, UNDP, World Bank etc.

In the reference of the above stated development, this paper aims to critically examine the efforts of India in fulfilling its commitment to ensure education for all in Jomtien through exploring the issues of accessibility, affordability and accountability on the implication level.

The method of the study was qualitative and theoretical in nature. The findings were generated based on comprehensive review of research papers related with performance of Indian state in universalizing the education at different levels.

The study got concluded by identifying gaps and giving suggestions which could help the state to ensure participation of all in education at both qualitative and quantitative manner.

KEY WORDS: *Education for all, performance, accessibility*

1. INTRODUCTION

India is having one of the largest democracy in the world with a population of 1.21 billion (Census of India, 2011) covering 17 percent population of the world. India is a vast country comprising 29 States and seven Union Territories (UTs) with diverse sociocultural contexts and widely varying geographical and climatic conditions. Under a federal structure, the Centre and the States share the responsibilities for the planning and implementation of national development programmes. There are well defined constitutional provisions and mechanisms for sharing of resources and responsibilities between the Centre and the States.

Education has always remained a key focus in India since ages. In its 5000 years of history, education as per periodic context adapted itself and kept the narratives alive amongst masses. The historical division of India

intro ancient, medieval and modern is replete with evidences of keen participation of the societies in endorsing education at par with other concerns. However, the provision to include everybody as eligible aspirants is missing in any prominent historical division like ancient and Medieval period. The admission criteria were based on some selected parameters for selected few. (Of course, this limitation one can find out in country of any ancient civilization) This provision was inserted on a mandatory note after independence in 1947 when constitution of India under directive principle of article 45 attempted to impart free and compulsory education to all children between age group of 6-14 years of age. The goal of Education for All has been high on the agenda of the Government of India since the adoption of the Constitution of India in 1950 and the commencement of development planning



since 1951. In 1976 under 42nd amendment in the constitution, the subject of education changed from state subject which implies that the responsibility for development of education is shared by the Central and State Governments. . . National Policy on Education-1986 (revised in 1992) sought a 'meaningful partnership between the Centre and the States'. While the Planning Commission of the Government of India prepares the Five-Year National Development Plans in consultation with all the States/UTs and other stakeholders, the National Development Council, with representation of Chief Ministers of all States/UTs, ensures the national character and focus in the entire process of planning and the formulation of programmes. Since then the state is attempting to achieve this goal under universalization of elementary education. Various committees and commissions notably Secondary Education Commission, 1952, Indian Education Commission 1966, National Education Policy 1986, National Curriculum Framework 2002/2005 and National Education Policy 2020 are sufficient to understand the motive of the state to achieve the target.

As a follow-up to the Jometian Conference and Dakar Framework of Action for Education For all, attempts were made to link national education development goals and targets with the global EFA targets. A 'National Plan of Action for Education for All' was formulated in 2002 with a view to contextualize the Dakar goals and strategize policies and programmes for achieving the EFA goals. Programme for achieving the goal of Education for All were incorporated into the Xth, XIth and XIIth Five-Year national development plans.

But despite of all these consistent efforts made to achieve the target of universalization at different level, India has not been able to reach to each child to impart education due to multiple reasons. The paper is attempting to deliberate gaps under the broad purview of accessibility, affordability and accountability followed by concluding with suggestions.

2. OBJECTIVES OF THE STUDY

1. Study the goals and objectives of Education for all
2. Enlist the efforts made by India to achieve the target of Education for all
3. Highlight the factors creating hindrance for achieving the target of education for all
4. Critically analysis of the status with suggestive measures

3. METHODOLOGY OR DATA SOURCE

The paper is solely based on secondary information collected from different sources like books,

journal articles, reports of various government organization and commission, websites etc.

4. OVERVIEW OF EDUCATION FOR ALL

Education for all is the global movement backed by UNESCO to ensure education to each and every child without any discrimination. The beginning of this movement one can trace back at Jometian in 1990 where 155 countries and 150 organizations assembled to take vow to provide education to all by 2000 and "to evaluate achievements and undertake a comprehensive policy review at regional and global levels by 2000–2001" (Framework 49.6). Since then, intense deliberations and follow up were taken and culminated in the form of Dakar Framework in 2000 where around 181 countries and 1500 organizations participated to review and set new target by 2015. The following goals were set for attainment by the participating countries

1. *expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;*
2. *ensuring that by 2015 all children, with special emphasis on girls, children in difficult circumstances and from ethnic minorities have access to and complete free and compulsory primary education of good quality;*
3. *ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes;*
4. *achieving 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults;*
5. *eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with focus on ensuring girls' full and equal access to and achievement in basic education of good quality;*
6. *improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (Framework, 7).'*

5. IMPLEMENTATION OF GOALS OF EDUCATION FOR ALL IN INDIA

As already stated, Indian state is pro-active in universalizing the education at different levels, but due to vast differences at regional, religious, gender and socio-economic levels, the target could not be achieved. In that context the acceleration one can witness after the Jometian conference where India as one of the important signatories pledged for achieving the target at the earliest.



5.1 Post Jometian Development

In the decade 1991-2001, various centrally sponsored schemes, programmes and projects started in the country. The operation Blackboard and establishment of District Institute of Educational Planning (DIET) suggested in national educational policy 1986 got momentum. During this decade various projects like Andhra Pradesh Primary Education Project, Bihar Education Project, UP Basic Education Project, *Lok Jumbish* and *Shiksha Karmi* projects of Rajasthan and District Primary Education Programme (DPEP) at the state level were also initiated. The provision of Mid day meal scheme may be termed as one of the most influential steps which literal played significant role in universalization. Around 9.78 crore children benefited from this scheme in 2016-17. The area specific programme, based on district as a unit started in the year 1992 ended up in 2000 by covering 272 districts across 18 states of the country. For covering the special able children into purview, person with disability act was introduced in 1995 for capacity building and attitudinal changes amongst teachers for these children.

5.2 Post Dakar Framework Development

After Dakar Framework, Government moved for initiating very comprehensive programme as *Sarva Shiksha Abhiyan* (SSA) in 2001 to cover all non -DPEP districts before end of ninth five year plan. . The SSA in its course of development shifted its focus from strengthening infrastructure in schools to enhance enrollment and finally to improve quality of education. One of the significant visible achievements of SSA was strengthening the Educational Management Information System through DISE/U-DISE initiatives which had later acquired the status of the *Official Statistics* in 2012-13. Initially, the aim of SSA was to bring all the out-of-school, never enrolled, and dropped-out children back to school by 2003, achieve UPE by 2007, and UEE with satisfactorily quality of education by 2010 but nobody knows what had happened to all these targets.

In 2009, *Right to Education* was enacted ensuring that every child of age 6 to 14 years is enrolled because of which there is no target year by which UPE and UEE are to be achieved which is continued. The local authorities are supposed to identify out-of-school children at the beginning of an academic year which is then to provide special training of 2 months to 3 years and then to make them sit in the age-appropriate class.

In the continuation to universalize the secondary education, RMSA was initiated in 2009 to enhance enrollment beyond elementary level to all children without any subjectivity. For achieving the success in the shortest time, private partners were also encouraged to participate. For the universal access, following strategies were adopted

1. *Identification of the disadvantaged groups: For this purpose, educational indicators like gross*

enrollment ratio (GER), net enrollment ratio (NER), drop-out rate, retention rate, gender parity index (GPI), gender gap, etc. were analysed.

2. *Need assessment: This is the critical step to prepare for the equity plan where the factors affecting the education of this group of children were evaluated with the involvement of the community members, teachers, civil society, etc.*
3. *Strategising for the addressing gaps: Since there are multiple interwoven factors that cause the un-equitable condition in this scenario, the strategy was called to have a set of multi-dimensional activities.*
4. *Project-based proposal: Development of a project-based strategy enables the RMSA to call for an evidence-based and outcome-oriented strategy*

(Source: https://en.wikipedia.org/wiki/Rashtriya_Madhyamik_Shiksha_Abhiyan)

Similarly at the higher level, Rashtriya Uchchar Shiksha Abhiyan (RUSA) was initiated to enhance the access of higher education in 2013. It helps the state initiatives to revive higher education.

For promoting the girls education, various schemes have been launched at the center and state level like Beti Bachao, Beti Padoo, Sukanya Samridhi Yojna, CBSE Udaan Scheme, National scheme of incentive to girls for secondary education etc. As per the report of Ministry of Education in 2018, girls participation increased at all levels, but still it is away from 100% due to reluctant attitude of the parents.

The state move to universalize education at all levels under ' Samagra Shiksha Abhiyan' (Holistic Education Movement) as a major recommendation of New Education policy 2020 may be considered as late realization by the state to bridge the gap as it has been approved by the union budget 2018-19 to improve school education from pre-primary to higher secondary by ensuring equal opportunities and equitable learning outcomes. This is major move by the government to bridge the gap. The main features of this programme are

1. **Holistic Approach to Education** - It means to eliminate segregation of school education into primary, secondary and higher secondary and cover the entire span holistically for any planning and reform
2. **Administrative reform** – Envisaging single administrative structure with provision of flexibility to state set their priorities as per their feasibility
3. **Focus on Quality of Education** – In order to bring quality emphasis would be capacity building of the teachers and teacher educators and administrators with the assistance of technology. Along with that encouragement of



science and maths at the secondary level, develop foundational literacy under Pade bharat and bade Bharat and issuing library grants to each school are the further steps to improve quality in education

4. **Focus on Digital Education** - Digital Education has been widely acknowledged as strong medium to achieve the target of universal access. To implement it, 'operation digital board' at secondary level in next five years, enhancing usage of smart classroom, digital boards and DTH channels and supporting infrastructure related with digital education are few steps to achieve the target
5. **Strengthening of Schools**- Improvement in transport facilities. School grant on the basis of school enrollment, hygiene and quality of infrastructure are noteworthy steps for strengthen the schools
6. **Focus on Girl Education** – Updation of various schemes and including schemes to increase enrollment of girls in school education
7. **Focus on Inclusion** – increasing grant for distributing uniforms under RTE Act from 400 to Rs.600 per child per annum and same for allocation of textbooks and ensuring stipend for girls with special needs
8. **Focus on skill Development** – Emphasis on vocational skills and integration with curriculum are the main features
9. **Focus on sports and Physical Education**- Sports education as an integral part of the curriculum and the government would grant amount to purchase sports equipment on continuous basis
10. **Focus on regional Balance**- In the continuation of the state efforts to promote balanced educational development, educationally backward districts would be promoted after identifying them on primary note

6. HINDRANCES IN IMPLEMENTING EDUCATION FOR ALL

Despite of all the major policy provisions and constant efforts by the Governments at the Center and State level, still education for all has not reached to its absolute attainment. According to the report of National Sample Survey, still 3.22 Million children are out of school. At the enrollment level, though 100% is shown by the government, but it is at the primary level only. At the Secondary and higher Secondary level, data is 75 to 57%.

In order to understand the reasons behind this gap, deliberations have been wrapped up under three broad subthemes – accessibility, affordability and

accountability with the help of reviewing reports generated by the Ministry of Education and web site of Education for all in India. The compilation is giving the following picture

Efforts made by the Central and State Governments have resulted in an increase in enrolment but the goal of universal school education in the real sense is still a far distant dream. Unless the efficiency of the primary level of education is improved the higher levels of education cannot be expected to receive a quantum jump

7.1 ACCESSIBILITY

In 2004-2005, data available from the Ministry of Education(MOE) showed that 182 million students were enrolled in 1.04 million elementary schools (grades 1-8) across the country. This accounted for approximately 82% of children in the 5-14 year age group in that year. After Right to Education Act 2009/2010. Of the 14.6 million children who joined elementary schools between 2007-08 and 2012-13, 56% were girls, 32% from disadvantaged groups of Scheduled Castes and Scheduled Tribes and 59% Muslims. School infrastructure has climbed up to 1.4 million schools with 7.72 million teachers so that 98% habitations have a primary school (class I-V) within one kilometer and 92% have an upper primary school (class VI-VIII) within three kilometer walking distance. Findings says:

- Schooling provision favors those better off, and disadvantaged groups (including poor children, girls, children from Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Class (OBC) groups) have less access and access to poorer quality education.
- Large variations in access exist across different states, geographical areas, and social categories such as gender, caste and ethnicity. (https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf)

7.2 AFFORDABILITY

- In 2017-18, according to NSS Survey, there were about 13.6 per cent persons of age 3 to 35 years who were never enrolled due to 'not interested in education' and 'financial constraints. Among those who were enrolled, drop-out rate was as high as 10 per cent at primary level, 17.5 per cent at upper primary/middle and 19.8 per cent at secondary level. In the absence of suitable financial support system and high burden of course fee especially in higher education pushes them out of the education system," says the report. Tilak (1996) and Mehta (1996) for example found high cost of schooling in terms of tuition fees, examination fees, expenditure on books and stationary and private coaching as one of the



main reasons for denying children's access to school

- Mehrotra and Panchamukhi (2006) on the basis of their survey of eight states with the largest out-of-school population, claimed that financial burden of education is significantly higher for households located in urban centres and for those with children going to private unaided school.
- In absolute terms, on an average the cost per child in rural government schools in these states was Rs. 891 per annum, while in private unaided schools it was Rs. 1,588. In urban areas it was Rs. 1,100 in government schools, and Rs. 2,268 in private unaided ones.
- The composition of various components of expenditure on education indicates that the course fees which is 50.8 per cent at all India level (including tuition, examination, developmental fees and other compulsory payments) among others contributes about half of the average expenditure of a basic course.
- India is spending only 3.83 per cent of its GDP on education, it is not sufficient to catch up with the education standards of developed nations.
- "It will take six generations or 126 years to catch up with developed countries if we do not change our education system dramatically," "The proportion of course fee is also high in rural and urban areas. The second largest component of average expenditure on education by student is *books, stationary and uniform where an average student in the rural areas is spending more than 10 percentage points as compared to urban areas,*" says the survey.

7.3 ACCOUNTABILITY

Millions of children not going to school and many not achieving minimum proficiency levels at school indicate that education systems are not on track. The report provides clear evidence on accountability tools that are working and that are not," Shigeru Aoyagi, director and UNESCO representative said. (Global Education Monitoring (GEM) report,2017) Some initiative have been taken to ensure accountability of the school education sector through

the Right to Education Act of 2009 which specified that each school create a school management committee to carry out management and monitoring functions of the school. The SMC was to have three fourth representation to parents and ensure local citizen run monitoring of school activities which allowed for some kind of bottom up accountability measures that encouraged educators to perform their functions

8. CONCLUSION

On the basis of entire facts and figures sequenced in achievement and non-achievement in the context of education for all in the preceding paragraphs, this is quite evident that state is striving hard to accomplish the goals at varied levels ,but due to historical, social ,political and economical factors is away from achieving it in the future. Due to rich historical lineage, societies are participating in an educational endeavor in their own pace. The Annual status of Educational Report (ASER) published in 2011 released by Ministry of Education in its finding showed improvement in rural children enrollment of around 97% at primary level in one hand and decline at arithmetic, reading and academic level at another level. A study done by J.D Singh has attributed to all these due to '*Poverty, geographic isolation, gender, unawareness, corruption, lack of qualified teachers, huge population, lack of fundamental resources and political unwillingness, lack of work culture and positive vision, language and ethnicity are some of the main obstacles blocking the contemporary Indian education.*' (Singh J.D 2013) Apart from these there are teacher related issues are there like job stability, assigning non-teaching jobs like collecting census data, promote government programme, electoral duties.

In a country like India, the universalization in respect to education for all is very challenging. The commitment to it can be achieved through

1. Creating meaningful curriculum which could attract the masses without any persuasion
2. Filling up vacancies of teachers and teachers should be asked to teach only
3. Creating proper infrastructure
4. Provision of neighborhood schools

In its final conclusion, the paper in order to affirm compatibility with the topic(how much has been covered and how much is left) is going to be ended with sharing the following details related with school education in India in 2017-18 (<https://educationforallindia.com/samagra-shiksha/>)



Status of School Education	Percentage
No.of Schools	15,58,903
Percentage of Private Schools	20.67%
Percentage of trained teachers	81.39%
Percentage of Single teachers School Government)	7.82%
Percentage of Single-Classroom Schools (Government):	3.99%
Percentage of Schools with Functional Computer(s):	13.07%
Percentage of Schools with Electricity	63.14%
Percentage of Schools with Internet Connection	13.61%
Average Annual Drop-out Rate, Secondary level:	18.51%
Retention Rate at Secondary level	57.72%
Transition Rate from Secondary Higher to Secondary level	68.05%
Transition Rate from Upper Primary to Secondary level	89.23%
Gender parity Index, Secondary Grades	1.03%
Completion Rate at Secondary Level	64.97%

WEB SOURCES

1. <https://educationforallindia.com/samagra-shiksha/>,
2. https://www.researchgate.net/publication/263469541_Education_for_All_in_India_The_Major_Issues_Challenges_and_Possible_Enablers
3. <https://wenr.wes.org/2018/09/education-in-india>
4. <https://doi.org/10.1093/oxrep/grm015>,<https://academic.oup.com/oxrep/article/23/2/168/504868>
5. <https://www.socialworkfootprints.org/special-articles/issues-challenges-of-education-in-india>
6. <https://indiaeducationdiary.in/unesco-launches-2020-state-of-the-education-report-for-india-vocational-education-first/>
7. <https://www.dvv-international.de/en/adult-education-and-development/editions/aed-552000/dakar-education-for-all/from-jomtien-to-dakar-meeting-basic-learning-needs-ndash-of-whom>
8. https://en.wikipedia.org/wiki/Sarva_Shiksha_Abhiyan
9. <https://www.yourarticlelibrary.com/dpep/district-primary-education-programme-dpepexplained/66680>
10. <https://akshayapatra.medium.com/how-mid-day-meal-plays-an-important-role-in-government-schools-da9d7dd38da>
11. http://www.niepa.ac.in/download/Publications/CPRHE/March_2016/CPRHE_Research%20_%20Paper-1.pdf
12. <http://egyankosh.ac.in/bitstream/123456789/7920/1/Unit-6.pdf>
13. <https://ncert.nic.in/textbook/pdf/heih111.pdf>
14. https://www.researchgate.net/publication/342123463_Impact_of_Pandemic_COVID-19_on_Education_in_India
15. http://dise.in/Downloads/Publications/Documents/Analytical_Table_2015-16.pdf,
16. https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESG2016.pdf



CROP YIELD PREDICTION USING MACHINE LEARNING AND CLOUD COMPUTING

Disha A

MCA Scholar, School of CS & IT, Dept. of MCA Jain(Deemed-to-be) University, Bangalore

ABSTRACT

Agriculture is the field which assumes a significant part in improving our nations economy. India is an agrarian country and its economy is generally founded on crop efficiency. Choosing of each yield is vital in the farming arranging. The determination of yields will rely on the various boundaries, for example, market value, creation rate and the distinctive government approaches. Numerous progressions are needed in the farming field to improve changes in our Indian economy. We can improve crop yield by utilizing AI procedures which are applied effectively on cultivating area.

Stretching out web based business to the cultivating local area is a significant advance in the computerized change of India. For Mr. Gupta, it addresses the democratization of internet business. Today, ranchers have the choice to purchase online as opposed to going through hours making a trip to and from actual retail locations. "We are digitizing agri-business in India with AWS—engaging ranchers with internet business availability. Likewise, by exhibiting recordings on successful harvest cultivating, ranchers have had the option to build their yield yields by in excess of 25%," Mr. Gupta says.

With the site running on the AWS Cloud, improvement time is a lot more limited. Mr. Gupta remarks, "With AWS, our IT activities productivity has improved by at any rate 80% while creating cost investment funds of in excess of 50%, on the grounds that we can choose, convey, and oversee AWS assets effortlessly. There is no acquirement cycle or need to devote capital spending plans to projects. Our month to month AWS charging is not even close to the expense of power for an on-premises climate of a comparative size."

KEYWORDS: *Indian Agriculture, Machine Learning Techniques, Crop selection method.*

II. INTRODUCTION

The main goal of agricultural planning is to achieve maximum yield rate of crops by using limited number of land resources. Many machine learning algorithms can help in improving the production of crop yield rate.

Whenever there is loss in unfavourable conditions we can apply crop selecting method and reduce the losses. And it can be used to gain crop yield rate in favourable conditions. This maximising of yield rate helps in improving countries economy.

We have some of the factors that influence the crop yield rate. They are seed quality and crop selection. We need test the quality of the seeds before sowing. As we know that good quality of seeds helps in getting more yield rate. And selection of crops depends upon two things that is favourable and unfavourable conditions. This can also be improved by using hybridisation methods. Many researches are carried out to improve agricultural planning. The goal is to get the maximum yield of crops. Many

classification methods are also applied to get maximum yield of crops.

Machine learning techniques can be used to improve the yield rate of crops. The method of crop selection is applied to improve crop production.

For the better yield we need to consider soil type and soil fertility things and also one of the major factors rainfall and groundwater availability if it is dry land it is better to go for cash crops and if is wetland it is better to go for wheat and sugarcane.

There are 15 agro-climatic regions in India these regions are divided on the bases of a type of the land. Each agro-climatic regions can grow some specific crops. Based on that we need to suggest the farmer that which crop is best among those crops which belong to those climatic regions.

Achieving the maximum crop at minimum yield is the ultimate Aim of the project. Early detection of problems and management of that problems can help the farmers for better crop yield. Crop yield prediction is the important research which helps to secure food. For the better understanding of the crop



yield, we need to study of the huge data with the help of machine learning algorithm so it will give the accurate yield for that crop and suggest the farmer for a better crop.

Improving the quantity of the crop is the key goal of precision agriculture means obtaining a better understanding of the crop using the information technology methods. The main goal of precision agriculture is profitability and sustainability

III.OBJECTIVE OF THE PROJECT

The proposed structure targets predicting or expecting the gather yield by learning the past data of the developing area. By thinking about various variables, for instance, soil conditions, precipitation, temperature, yield and various substances the system manufactures an expecting a model using AI techniques. Here we use unmistakable AI strategies such sporadic forest, Polynomial Regression, Decision Tree. Execution is surveyed subject to expected exactness.

IV. LITERATURE SURVEY

In [1] J.P. Singh, Rakesh Kumar, M.P. Singh and Prabhat Kumar, have presumed that this paper helps in improving the yield pace of harvests by applying grouping strategies and contrasting the boundaries. We can likewise do dissecting and expectation of harvests utilizing baysian calculations. The calculations utilized are Bayesian calculation, K-implies Algorithm, Clustering Algorithm, Support Vector Machine. The burden is that there could be no appropriate exactness and execution.

In [2] the creators Subhadra Mishra, Debahuti Mishra and Gour Hari Santra, have inferred that this is a high level explored field and is relied upon to fill later on. The joining of software engineering with horticulture helps in determining rural yields. This technique additionally helps in giving data of harvests and how to expand yield rate. The calculations utilized are Artificial neural organizations, Decision Tree Algorithms, Regression investigation. The determination is clear approach isn't determined.

Monali Paul, Santosh K. Vishwakarma, Ashok Verma[3] In request to foresee the yielding of the harvests, the harvests are broke down and dependent on investigation they are arranged. This categorisation is done dependent on information mining calculations. This paper gives knowledge into different arrangement rules like Naive Bayes, K-Nearest Neighbor. Utilizing this paper, we dissected the grouping rules and recognized which will be suitable for informational index which we will use in our task.

V. PROBLEM STATEMENT

Early forecast of harvest yield is significant for arranging and taking different strategy choices. Numerous nations utilize the customary procedure of information assortment for crop checking and yield forecast dependent on ground based visits and reports. These techniques are abstract, exorbitant and tedious. The normal issue in existing harvest yield forecast techniques are given underneath,

The main issue of existing harvest yield expectation strategy is exactness and tedious issue. In existing time arrangement crop yield forecast strategy doesn't respond to varieties that happen for cycles and occasional impacts. Needs broad data to create and test the model and furthermore accessible data in farming is inadequate and fragmented in existing reenactment model. Restricted investigations have been made in crop yield forecast utilizing existing choice tree strategy. Expectation mistake esteem likewise significant issue in crop yield forecast or assessment strategies. These are the primary disadvantages of different existing works, which inspire us to do this examination on crop yield expectation.

VI. EXISTING SYSTEM

An agro-put together nation depends with respect to farming for its financial development. At the point when a populace of the nation builds reliance on horticulture additionally increments and ensuing monetary development of the nation is influenced.

In the present circumstance, the harvest yield rate assumes a huge part in the financial development of the country. Along these lines, there is a need to expand crop yield rate. Some organic methodologies (for example seed nature of the yield, crop hybridization, solid pesticides) and some substance draws near (for example utilization of manure, urea, potash) are done to tackle this issue.

Notwithstanding these methodologies, a harvest sequencing procedure is needed to improve the net yield pace of the harvest over the season. One of existing framework we distinguished is Crop Selection Method (CSM) to accomplish a net yield pace of harvests over the season. We have taken illustration of CSM to show how it helps ranchers in accomplishing more yield Crop can be named:

a) Seasonal yields—harvests can be planted during a season. for example wheat, cotton.

b) Whole year crops—harvests can be planted during the whole year. for example vegetable, paddy, Toor.

c) Short time manor crops—crops that set aside a short effort for developing. for example potato, vegetables, proportion. d) Long-time manor crops—These yields set aside a long effort for developing. for example sugarcane, Onion. A mix of these harvests can be chosen in a grouping depend-



ent on yield rate each day. Represents successions of harvests with aggregate yield rate over the season. CSM strategy, appeared in may improve the net yield pace of harvests utilizing the restricted land asset and furthermore expands re-use of use of the land.

Essentially, in crop choice strategy utilizes method where it suggests diverse arrangement of yields for same territory throughout the long term. There are different alternatives are accessible to choose for ranchers.

They can pick one of the alternatives and notice the outcomes. The mix which will give high return for same territory is produced as yield for that space. In this manner CSM strategy attempts to anticipate the reasonable yields for given region. Cultivating Systems in India are deliberately used, as indicated by the areas where they are generally appropriate.

VII. PROPOSED SYSTEM

A. Acquisition of training dataset:

The exactness of an AI calculation may rely upon the quantity of boundaries utilized and to the degree of rightness of the dataset. Our dataset contains the N, P, K, and pH upsides of various types of soils as properties and it likewise contains the comparing crops that can be filled in that dirt as mark. Accordingly, by utilizing a fitting AI calculation we can prepare the dataset to anticipate the most reasonable yield that can be developed under the given information boundaries.

B. Data preprocessing:

Information preprocessing is the subsequent advance and it contains two stages. Unique dataset can contain heaps of missing qualities so at first all these ought to be taken out. Missing qualities are signified by a dab in the dataset and their essence can decay the worth of whole information and it can lessen the exhibition.

Thus, to tackle this difficult we supplant these qualities with enormous negative qualities which will be treated as anomalies by the model. Producing the class marks is the subsequent advance. Since we are utilizing a regulated learning strategy, for every section in the dataset there ought to be a class name which is made during the preprocessing step.

VIII. METHODOLOGIES

[1] Regression analysis

Regression analysis a measurable method that is utilized to foresee the qualities from the normal yield amount when the yield amount is consistent.

[2] Linear Regression

Linear regression is a linear method to build a relationship between two variables which are continuous – one variable which is independent and denoted by X and another variable which is dependent and denoted by Y. This is used for prediction which is based on statistical methods. The graph of linear regression classification is a straight line. The formula for calculating the linear regression is-

$$y' = b + ax$$

calculate the slope by calculating b.

[3] Non-Linear Regression

Nonlinear regression is a regression technique which does not depend on one variable but depends on multiple variables or predictor variables. The graph of this nonlinear regression is a curve where all the variables are dependent on each other. This model is used to calculate the sum of squares which is the dispersion of data points. This method is based on trial and error technique and needs many assumptions. The trial and error method is used to minimise the value of sum of squares to make the data point fit in the data set.

[4] Dataset Description

Generally researchers used .csv files of agriculture dataset for crop yield prediction. The dataset is supervised learning. It consists of different attributes like County Name, State, humidity, temperature, NDVI, wind Speed, yield

Crop yield is the measure of crop produced per area of land. It's an important metric to understand because it helps us understand food security and also explains why your tomatoes can cost more one year and then less the following year.

IX. CONCLUSION

This project is undertaken using machine learning and evaluates the performance by using Random forest, Polynomial Regression and Decision Tree algorithms. In our proposed model among all the three algorithm Random forest gives the better yield prediction as compared to other algorithms. Along with random forest, Polynomial Regression, Decision Tree model classify the output that shows improvements in dataset. So we analysed that proposed model has got more efficiency than the existing model for finding crop yield.

REFERENCES

1. J.iajun Zong, Quanyin Zhu, "Apply Grey Prediction in the Agriculture Production Price", Fourth International Conference on Multimedia Information Networking and Security, 2012.



2. Michael gurstein, "a decision support system to assist the rural poor in Bangladesh", *IEEE TECHNOLOGY AND SOCIETY MAGAZINES*, September 2013.
3. Monali Paul, Santhosh K. Vishwakarma, Ashok Verma, "Prediction of Crop Yield using Data Mining Approach" *Computational Intelligence and Communication Networks(CICN)*, International Conference 12-14 Dec. 2015.
4. Tng Zhang, "Solving large scale linear prediction algorithm", *proceedings of the twenty-first international conference on Machine Learning* Aakunuri Manjula, G. Narsimha, "XCYPF: A Flexible and Extensible Framework for Agricultural Crop Yield Prediction", *IEEE Sponsored 9th ISCO, 2015*.
5. Aakunuri Manjula, G. Narsimha, "XCYPF: A Flexible and Extensible Framework for Agricultural Crop Yield Prediction", *IEEE Sponsored 9th ISCO, 2015*.
6. D. Ramesh, B. Vishnu Vardhan, "Analysis Of Crop Yield Prediction Using Data Mining Techniques", 2015
7. A.A. Raorane, R. V. Kulkarni, "Data Mining: An effective tool for yield estimation in the agricultural sector"< *IJETTCS*, vol. 1, no. 2, pp. 75-79, 2012.



A STUDY ON PREDICTION IN CLOUD COMPUTING

Disha Ashwin

MCA Scholar, School of CS & IT, Dept. of MCA Jain (Deemed-to-be University)-560069

Gurubasava

Assistant Professor, School of CS & IT, Dept. of MCA Jain (Deemed-to-be University) - 560069

ABSTRACT

Present day basic foundations need to handle altogether enormous informational collections. Interruption location frameworks and bound together danger the executives frameworks have the part of keeping basic foundations secure against digital assaults. Be that as it may, in the realm of large information, these frameworks are battling to adapt to over-burden and regularly become the container neck in the information organization. To defeat this, our exploration researches the utilization of sending interruption discovery and interruption forecast procedures in a cloud climate. Therefore, in this paper, an overview of existing interruption location frameworks is introduced and a conversation on how their organization can improve current security methods in a distributed computing climate is advanced. An epic strategy for interruption forecast framework is additionally advanced in this paper. Prescient measurable techniques are utilized for demonstrating the ideas set forward. Expectation arrangements; and the deficiency of 'single-strategy models' for building general answers for anticipate interruptions. Moreover, as this examination shows, the idea of incorporating different techniques, for example, game hypothesis ideas and hazard appraisal strategies, works with the advancement of a more proficient forecast model.

KEYWORDS- *cloud computing, Aws SageMaker, Python IDE's, Prediction .*

I. INTRODUCTION

In 2021, cloud resolve how organizations adjust. No one knows how far into 2021 we'll keep on telecommuting, shop principally on the web, or stay away from air travel — yet plainly every undertaking should turn out to be more deft, responsive, and versatile than any time in recent memory.

At the point when you glance back at the public mists created over the most recent 15 years, it nearly appears as though they were intended to deal with the worldwide interest stun brought about by the Covid-19 pandemic. Not exclusively did the pandemic transform a large number of office laborers into home and telecommuters short-term, it additionally changed how every IT office and advancement shop worked. Without public cloud applications, improvement administrations, instruments and framework accessible to each business and customer on request, envision how unique (and stumbled) the pandemic reaction would

have been. In 2020, cloud demonstrated that, to be sure, one should never allow a decent emergency to go to squander.

The hyperscale public cloud market will get back to hypergrowth. After some conditioning in broad daylight cloud income development rates in late 2019, the pandemic turbocharged the market by mid-2020, and Forrester presently predicts that the worldwide public cloud foundation market will become 35% to \$120 billion of every 2021. Alibaba will take the number-three income spot worldwide, after AWS and Microsoft Azure. Lock in — the cloud ride is taking off...again.

Cloud-local tech request will spike as serverless and compartments heat up. Before the pandemic, about 20% of designers consistently utilized compartment and serverless capacities to construct new applications and modernize old ones. We anticipate 25% of engineers will utilize serverless and almost 30% will utilize holders consistently before the finish of 2021, making a spike in



worldwide interest for both multicloud compartment advancement stages and public-cloud compartment/serverless administrations.

On-premises fiasco recuperation (DR) methodologies will blur, with recuperation headed for the cloud. Coronavirus focused a splendid light on each organization ill-equipped to recuperate from a server farm blackout and pulled together undertaking IT groups on improving strength. Before the pandemic, hardly any organizations ensured information and responsibilities in the public cloud. In 2021, we foresee that an extra 20% of ventures will move DR activities to the public cloud — and will not think back.

II. METHODOLOGIES

1. AWS SageMaker:- Machine Learning is the hottest topic in the current era and the leading cloud provider Amazon web service (AWS) provides lots of tools to explore Machine Learning, creating models with a high accuracy rate. This article makes you familiar with one of those services on AWS i.e Amazon Sagemaker helps in creating efficient and more accuracy Machine learning models and the other benefit is that you can use other AWS services in your model such as S3 bucket, amazon Lambda for monitoring the performance of your ML model you can use AWS Cloudwatch which is a monitoring tool.

Amazon SageMaker is a completely overseen administration that empowers information researchers and designers to rapidly and effectively fabricate, train, and send AI models at any scale. Amazon SageMaker incorporates modules that can be utilized together or freely to assemble, train, and send your AI models.

2.Jupyter Notebook:- JupyterLab is an online intuitive advancement climate for Jupyter note pads, code, and information. JupyterLab is adaptable: design and organize the UI to help a wide scope of work processes in information science, logical registering, and AI. JupyterLab is extensible and secluded: compose modules that add new parts and coordinate with existing ones.

The Jupyter Notebook is an open-source web application that permits you to make and share archives that contain live code, conditions, representations and story text. Utilizations include: information cleaning and change, mathematical reproduction information perception, AI, and significantly more. Voilà assists you with conveying experiences, by changing a Jupyter Notebook into an independent web application you can share. It gives you power over what your perusers experience in a safe and adaptable intelligent dashboard.

III. SCOPES

At the point when I evaluated Amazon SageMaker in 2018, I noticed that it was an exceptionally adaptable AI and profound learning administration that upholds 11 calculations of its own, in addition to any others you supply. Hyperparameter improvement was as yet in see, and you expected to do your own ETL and highlight designing.

From that point forward, the extent of SageMaker has extended, enlarging the center note pads with IDEs (SageMaker Studio) and mechanized AI (SageMaker Autopilot) and adding a lot of significant administrations to the general environment, as demonstrated in the outline beneath. This environment upholds AI from arrangement through model structure, preparing, and tuning to sending and the executives — as such, start to finish..

What's going on? Given that I last took a gander at SageMaker soon after it was delivered, the rundown is somewhat long, yet how about we start with the most apparent administrations.

SageMaker Studio, an IDE dependent on JupyterLab

SageMaker Autopilot, which consequently constructs and prepares up to 50 component designed models that can be analyzed in SageMaker Studio

SageMaker Ground Truth, which assists with building and oversee preparing datasets

SageMaker Notebooks presently offer versatile figure and single-tick sharing

SageMaker Experiments, which assists engineers with envisioning and think about AI model cycles, preparing boundaries, and results

SageMaker Debugger, which gives constant observing to AI models to improve prescient precision, diminish preparing times, and work with more prominent reasonableness

SageMaker Model Monitor, which identifies idea float to find when the presentation of a model running underway starts to go amiss from the first prepared model

Other striking upgrades incorporate the discretionary utilization of spot occurrences for note pads to diminish the expense; another P3dn.24x1 occasion type that incorporates eight V100 GPUs; an AWS-improved TensorFlow system, which accomplishes near straight versatility when preparing various sorts of neural organizations; Amazon Elastic



Inference, which can drastically diminish derivation costs; AWS Inferentia, which is a superior AI induction chip; and new calculations, both inherent to SageMaker and accessible in the AWS Marketplace. Also, SageMaker Neo incorporates profound learning models to run anxious processing gadgets, and SageMaker RL (not appeared on the graph) gives an oversight support learning administration.

IV. CONCLUSION

This project is undertaken using machine learning and evaluates the performance by using Random forest, Polynomial Regression and Decision Tree algorithms. In our proposed model among all the three algorithm Random forest gives the better yield prediction as compared to other algorithms. Along with random forest, Polynomial Regression, Decision Tree model classify the output that shows improvements in dataset. So we analysed that proposed model has got more efficiency than the existing model for finding crop yield.

X. REFERENCES

1. <https://www.geeksforgeeks.org/what-is-sagemaker-in-aws/>
2. <https://jupyter.org/>
3. J.iajun Zong, Quanyin Zhu, "Apply Grey Prediction in the Agriculture Production Price", Fourth International Conference on Multimedia Information Networking and Security, 2012
4. Michael gurstein, "a decision support system to assist the rural poor in Bangladesh", IEEE TECHNOLOGY AND SOCIETY MAGAZINES, September 2013
5. Monali Paul, Santhosh K. Vishwakarma, Ashok Verma, "Prediction of Crop Yield using Data Mining Approach"
6. Tng Zhang, "Solving large scale linear prediction algorithm", proceedings of the twenty-first international conference on Machine Learning Aakunuri Manjula, G. Narsimha, "XCYPF: A Flexible and Extensible Framework for Agricultural Crop Yield Prediction", IEEE Sponsored 9th ISCO, 2015
7. Aakunuri Manjula, G. Narsimha, "XCYPF: A Flexible and Extensible Framework for Agricultural Crop Yield Prediction", IEEE Sponsored 9th ISCO, 2015 [6] D. Ramesh, B. Vishnu Vardhan, "Analysis Of Crop Yield Prediction Using Data Mining Techniques", 2015
8. A.A. Raorane, R. V. Kulkarni, "Data Mining: An effective tool for yield estimation in the agricultural sector"< IJETCS, vol. 1, no. 2, .pp. 75-79, 2012



ONLINE V/S TRADITIONAL PEDAGOGY IN PRESENT EDUCATION: A CRITICAL VIEW

Dr. Gaonkar Gopalakrishna M

*Associate Professor and Head, Dept of Economics,
Govt. First Grade College and Centre for PG Studies, Tenkanidiyoor, Udupi -576106*

Mr. Manjunatha M

Lecturer in Economics, Dept of Economics, Bhandarkars' Arts and Science College Kundapura.

Article DOI: <https://doi.org/10.36713/epra6938>

DOI No: 10.36713/epra6938

ABSTRACT

"Globalisation, new technologies and demographic developments constitute an enormous challenge; one of the answers to this problem is the access to lifelong learning." - (Jan Figel) Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libraries, the Internet sites and even in the home. It is the information that has become the key to the success in different walks of life. At the time of independence, India inherited an education system with glaring disparities between males and females, between upper and lower classes, between economically advantaged and disadvantaged groups and urban and rural population. Consequently, one of the primary responsibilities of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more and more primary schools, secondary schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education.

KEYWORDS: *Online, Traditional, Education, Pedagogy, Internet,*

I. INTRODUCTION

Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libraries, and the Internet sites and even in the home.

It is the information that has become the key to the success in different walks of life. Today, one of the primary responsibilities of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education. The report of United Nations Development Programme UNDP (1993) pointed out the fact that only seven percent of the relevant age group is enrolling for higher education in India.



Every stage of societal development requires an educational system that can adequately reflect its needs and demands. Currently we are witnessing in education global shifts that reflect changes brought about by computers and communication technology. This shift may be called Electronic Learning, or E-learning. E-learning is a mode of knowledge production and circulation wherein information technologies play a decisive role. The aim of learning is to explore and to add useful knowledge over and above faster copying, searching and distribute.

Concept of Online Education

The term Online Education means learn through online and it is basically the online delivery of information communication, training and learning. Online Education involves the use of computers and Internet to aid in the learning process. If a computer is a standalone, then we have Computer Learning (CL) that can be used either Computer Based Learning (CBL) or Computer Assisted Learning (CAL). CBL involves the computer taking the place, for the most part, of the teacher, and is popular in distance education. CAL involves a teacher using Online Education to supplement face-to-face teaching. Online Education has a number of other implications such as, Exploration Experience Engagement Ease of use, Empowerment, etc.

Concept of Traditional Education

The traditional learning comes in basic four forms which are:

1. **Classroom sessions:** Attending lectures wherein teacher takes lesson topic-by topic or lesson-by-

lesson. Generally learning takes place in collaborative atmosphere.

2. **The lab sessions:** Experiments are carried out in the lab by the teacher and/or by students themselves and study observations/ results of these experiments.

3. **Library sessions:** Students go to the library and explore books/study notes/magazines on subjects of their interest.

3. **Collaborative learning:** Students get in touch with co-students and discuss about their queries and get these queries solved by discussion among them or in some Classroom Sessions.

II. OBJECTIVE

1. To study the student's propensity for online education.
2. To review the changes in the field of education over a long period of time.
3. To know the need of online education in present scenario.
4. To study the short comings of online education.

III. METHODOLOGY

The study is based on primary as well as secondary data sources. The primary data are collected by google form. To collect the data structured questionnaire was circulated among students, respondents selected through random sampling method. Totally 200 students are included in the sample size. Thereafter, tabular analysis is done to analysis Online and Traditional Pedagogy. Simple statistical methods like averages, percentages and graphs are used to analyse. Secondary sources used are published reports, Journals, articles, etc.

IV. RESPONDENTS PROFILE

Table: 1 Profile of the Respondents.

	Frequency	Percentage		Frequency	Percentage
Age Groups			Male-Female Ratio of Respondents		
Below 16 Years	04	02%	Male	58	29%
16-20 Years	148	74%	Female	142	71%
20-24 Years	32	16%	Total	200	100%
24 and Above	16	08%	Social Category of Respondents		
Total	200	100%	General	58	29 %
Educational Level			SC/ST	06	03%
Secondary	06	03%	OBC	136	68%
Higher Secondary	48	24%	Total	200	100%
Graduation	90	45%	Current Enrolment Status		
Post-Graduation	48	24%	Full Time	134	67%
Diploma. /Others	08	04%	Part Time	66	33%
Total	200	100%	Total	200	100%

Sources:Primary Data



In this study among the randomly selected students 02% are from less than 16 years of age, 74% belonging to 16-20 years age group. In relating to gender representation 29% representing boys, 71% students are girls. When we observe their educational level 03% were having secondary education, 24% are having higher education as well as post-graduation respectively, 45% are graduates and 04% students are from Diploma and other streams. In this study 29% general category students were participated, 68% OBC students were participated and 03% SC and ST students were participated. Here 67% students were

enrolled as full time and remaining 33% students were enrolled as part time.

V. ANALYSIS

1. Convenience and Participation in Online Class

The study clearly depicts that traditional classes were more convenient to the students due to the various reason. Especially we found that the students from the rural region face bundle of problems in online class mainly network issues.

Table: 2 Convenience and Participation in Online Class

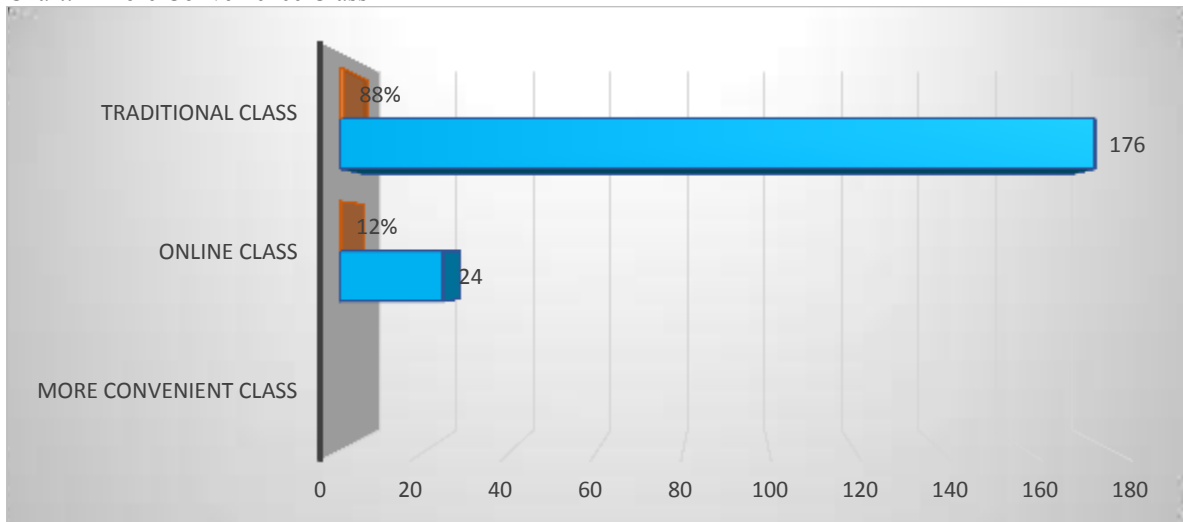
	Frequency	Percentage		Frequency	Percentage
More Convenient Class			Participation in Online Class		
Online Class	24	12%	Yes	188	94%
Traditional Class	176	88%	No	12	06%
Total	200	100%	Total	200	100%

Sources: Primary Data

Table 2 represent 88% students were prefer traditional class and only 12% students were gone for online class. From this we can conclude that online class is not a perfect substitute for traditional class just it is a choice but majority students are

participating in online class in these days. Here we can observe 94% students are participating in online class, just 06% students are not able to participate in online class.

Chart: 1 More Convenience Class



Sources:Primary Data



2. Difficulties and Differences between Online and Traditional Class

Table: 3 Difficulties and Differences between Online and Traditional Class

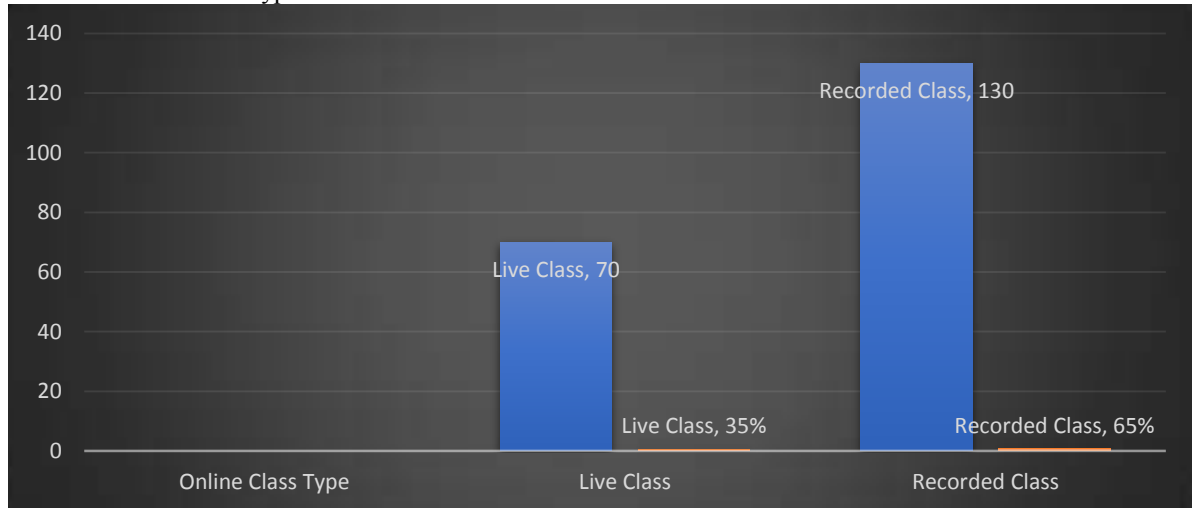
	Frequency	Percentage		Frequency	Percentage
Online Classes are More Difficult			Difference in Online Class		
Yes	148	74%	Much Difference	82	41%
No	34	17%	Not Much Difference	42	21%
Maybe	18	09%	Maybe	76	38%
Total	200	100%	Total	200	100%
Online Class Type			Availability of Instructor		
Live Class	70	35%	Available	156	78%
Recorded Class	130	65%	Not Available	44	22%
Total	200	100%	Total	200	100%

Sources: Primary Data

In the above table (Table No. 3) we can observe that difficulties in online class and difference between online and traditional class. For 74% students' online class is more difficult to attend the class as well as to understand the class. 41% students said that there is much difference between traditional and online class, for 38% students there maybe the

difference between both classes. Majority 65% students were prefer recorded class instead of live class. 78% students said that instructors are available for conversation. Here we can conclude that students especially from rural region are facing much difficulties in online class, they always go for traditional class.

Chart: 2 Online Class Type



Sources: Primary Data

3. Device Used for Online Class

We settled on a definition from Educause “Using portable computing devices (such as iPads, laptops, tablet PCs, PDAs, and smart phones) with wireless networks enables mobility and mobile learning, allowing teaching and learning to extend to spaces beyond the traditional classroom. Within the classroom, mobile learning gives instructors and

learners increased flexibility and new opportunities for interaction.” Here we can observe that almost all students were settled with smartphones. They use mobile phones regularly even for online class also. 91% students are using smartphone for online class, a very few students are using other devices like, desktop, laptop, etc.

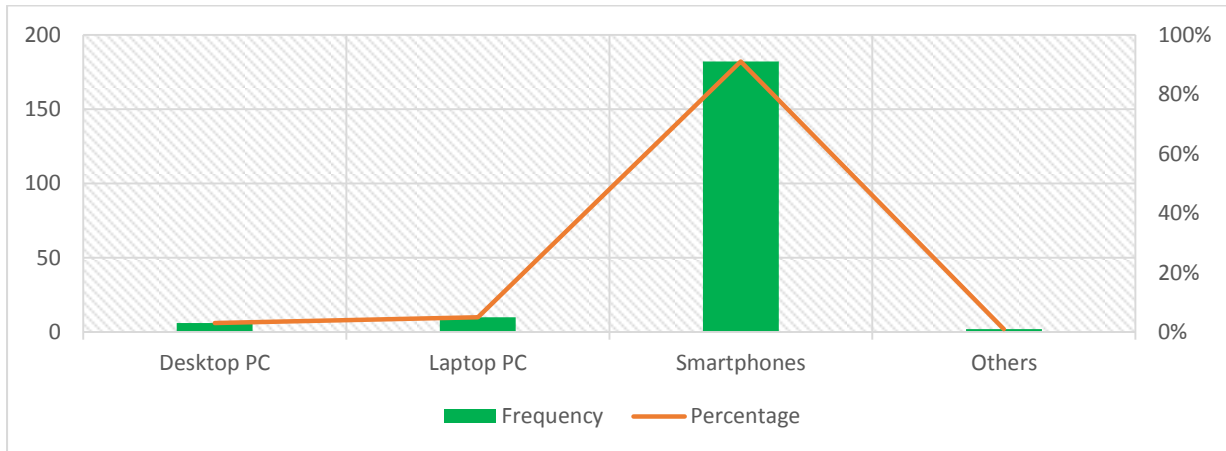


Table: 4 Device Used for Online Class

Devices	Frequency	Percentage
Desktop PC	06	03%
Laptop PC	10	05%
Smartphones	182	91%
Others	02	01%
Total	200	100%

Sources:Primary Data

Chart: 3 Device Used for Online Class



Sources:Primary Data

Mobile technology is becoming prevalent in today's society. Yet despite the widespread use of Internet-accessible mobile

of opportunities of collaborative learning, teacher supervision and the most glaring being lack of opportunities for hands-on learning in complex subjects such as science and mathematics. Along with that students also face physical health barriers, technical stability, availability online learning site etc.

4. PROBLEMS IN ONLINE CLASS

Comparing traditional education with online education brings forth significant deficiencies in the online mode such as lack of human connect, absence

Table: 5 Problems in Online Class

	Frequency	Percentage		Frequency	Percentage
Interaction with Co-learners			Accessibility of Internet		
Possible	82	41%	Easy	126	63%
Impossible	118	59%	Difficult	74	37%
Total	200	100%	Total	200	100%
Up-to-date ICT in Institution			Security in Online Class		
Available	132	66%	Secure	76	38%
Not Available	68	34%	Not Secure	124	62%
Total	200	100%	Total	200	100%
Physical Health BARRERS			Understandability of Online Learning		
Yes	120	60%	Understandable	60	30%



No	80	40%	Not Understandable	140	70%
Total	200	100%	Total	200	100%
Technical Stability in Online Learning			Availability of Online Learning Site		
Yes	108	54%	Regular	130	65%
No	92	46%	Irregular	70	35%
Total	200	100%	Total	200	100%

Sources: Primary Data

Table 5 shows that problems involved in the online class. Here only 59% students are able to interact with their co-learners, remaining 41% students are not able to interact with their co-learners. For 63% students it is easy to access the internet, the study depicts that 66% institutions have up-to-date ICT in their institution 34% institutions re suffer to provide up-to-date technology to their students. When we come to the security in online class it is most danger thing because majority 62% students were felt that online class is not secure that much. 60% students are facing health barriers in online class like eye strains, headache, etc. The most important thing found in the study is majority 70% students are not able to understand the class. Here we can observe that technical stability is also not that much at the same time online sites are also not available every time.

VI. CONCLUSION

For decades, scholars have debated on which mode of education is superior? Some scholars argue that online is superior and others argue that online is less effective than traditional face-to-face courses. A few others suggest that the hybrid mode (e.g., online blended with face-to-face lectures) is the most desired, inevitable and productive content delivery method for students. However, students' perceptions towards online learning as compared to traditional face-to-face learning have largely been overlooked. As per this study, It is found that majority of the students are facing communication problems, along with that, they are facing internet issues, etc. Thus, they strongly feel that the study environment in traditional class is more conducive for the study because in online class they just attend the class but not able to understand clearly.

VII. REFERENCE

1. Allen, I.E., & Seaman, J., (2011). *Going the Distance: Online Education in the United States, 2011*. Babson Survey Research Group pp. 4-5.
2. Banas, E., & Emory, W. (1998). *History and issues of distance learning*, *Public Administration Quarterly*, 22(3), 365-383.
3. Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., & Huang B. (2004). *How*

does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of educational research*, 74(3), 379-439.

<http://dx.doi.org/10.3102/00346543074003379>

4. Brown, J. C., & Park, H. S. (2016). *Longitudinal student research competency: Comparing online and traditional face-to-face learning platforms*. *Advances in Social Work*, 17(1), 44-58. <http://dx.doi.org/10.18060/20870>
5. Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., & Ciganek, A. P. (2012). *Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty*. *Computers & Education*, 58(2), 843-855. <http://dx.doi.org/10.1016/j.compedu.2011.10.010>
6. Cao, Y. (2011). *Online versus traditional MBA: An empirical study of students' characteristics, course satisfaction, and overall success*, *The Journal of Human Resources and Adult Learning*, 7(2), 1-12.
7. Cavanaugh, J., & Jacquemin, S. J. (2015). *A large sample comparison of grade-based student learning outcomes in online vs. face-to-face courses*. *Online Learning Journal*, 19(2).
8. Clark, R. A., & Jones, D. (2001). *A comparison of traditional and online formats in a public speaking course*. *Communication Education*, 50(2), 109-124. <http://dx.doi.org/10.1080/03634520109379238>
9. Cowden, P., & Sze, S. (2012, July). *Online Learning: The Concept of Less Is More*. In *Allied Academies International Conference. Academy of Information and Management Sciences. Proceedings*, 16(2), 1. Jordan Whitney Enterprises, Inc.
10. Deming, D. J., Goldin, C., & Katz, L. F. (2012). *The for-profit postsecondary school sector: Nimble critters or agile predators?* *Journal of Economic Perspectives*, 26(1), 139-164. <http://dx.doi.org/10.1257/jep.26.1.139>
11. Fedynich, L., Bradley, K. S., & Bradley, J. (2015). *Graduate students' perceptions of online learning*. *Research in Higher Education Journal*, 27, 1.
12. Ferriman, J. (2013). *The History of Distance Learning (Infographic)*. *Learn Dash*, www.learn-dash.com/the-history-of-distance-learning. Retrieved on July 11, 2014.
13. Giroux, H. (2015). *Higher education and the promise of democracy*. In *Future of Higher Education: Perspectives from America's Academic Leaders*, 53.
14. Harasim, L. M. (1989). *Online education: A new domain*. In Mason, R.D. and Kaye, A.R. (editors),



- Mindweave Communication, Computers, and Distance Education, Oxford, Pergamon, Press.*
15. Hatcher, M., Henson, J., & LaRosa, P. (2013). *Determinants of success in an online management information systems course: The significance of grade point average as a performance indicator. International Journal of Business Strategy, 13(4), 129-132.* <http://dx.doi.org/10.18374/IJBS-13-4.7>
 16. Mayerova, Sarka Hoskova- Zdena Rosicka (2015) *E-Learning Pros And Cons: Active Learning Culture? Procedia - Social and Behavioural Sciences 191 (2015) 958 – 962, Available online at www.sciencedirect.com. WCES 2014, 1877-0428, 2015 Published by Elsevier Ltd.*
 17. Miller, G. (2014). *History of Distance Learning.* Retrieved May 5, 2016 at: <http://www.worldwidelearn.com/education-articles/history-of-distance-learning.html>
 18. Moore, M. (1990). *Recent contributions to the theory of distance education. Open learning, 5(3), 10-15.* <http://dx.doi.org/10.1080/0268051900050303>
 19. Murdock, J., William, A., Becker, K., Bruce, M., & Young, S. (2012). *Online versus on-campus: A comparison study of skills sources, The Journal of Human Resources and Adult Learning, 8(1), 105-118.*
 20. Neuhauser, C. (2010). *Learning style and effectiveness of online and face-to-face instruction. The American Journal of Distance Education.*
 21. Sangrà A, Vlachopoulos D and Cabrera, N. *Building an Inclusive Definition of E- Learning: An Approach to the Conceptual Framework. The International Review on Research in Open and Distance Learning, 13 (2), 2012*
 22. Schlosser, L.A., & Simonson, M.R. (2009). *Distance education: Definitions and glossary of terms. IAP, 2009.*
 23. Shorwell, M., & Apigian, C. H. (2015). *Student performance and success factors in learning business statistics in online vs. on-ground classes using a web-based assessment platform. Journal of Statistics Education, 23(1), 1-19.*



A STUDY ON IMPACT OF SOCIAL MEDIA ON CONSUMERS BUYING BEHAVIOUR SPECIAL REFERENCE TO COIMBATORE CITY

¹S. Fashmitha

¹Student, Dr.N.G. P Arts and Science College, Coimbatore

²Mr.D. Shanmugavadivel

²Assistant Professor, Department of Commerce, Dr.N.G.P. Arts and Science College, Coimbatore

ABSTRACT

Social Media have provided new opportunities to consumer to engage in an social interaction on internet. Now a days, Consumers use social media to online communities, to generate content and to network with other users. The social media have changed the power structure at the place where goods sold and purchased online with marketing tools and techniques. The study observed that consumers are adapting to online marketing and their buying behavior is being influenced accordingly. The aim of this paper is to study the impact of social media on consumer buying behavior.

KEYWORDS: *Social media, consumer behavior, decision making process.*

1. INTRODUCTION

In the modern world, the usage of Social websites by consumers has mostly increased and usages of Social Networking Websites have extensive effect on these consumers in various ways. There are many online networking sites which affect consumer behaviour.

Social websites like Facebook, Twitter, Instagram, YouTube etc. is having many features which affect and attract many numbers of people. In today's life Social Media become a very strong useful tool using by the consumer in buying decision.

Social media Marketing is very important and it is among the most successful tool and technique in the field of every type of advertising. It is already known that how various marketing tools and techniques can increase number of selling articles is the main aim of every business man.

Consumer buying behaviour is the study of how individuals and organizations select and use products and services. This primarily focuses on psychology, motivations, and behaviour, such as how people choose between brands, how they research and shop, and how marketing campaigns can be improved so brands can effectively influence them.

Personal, psychological, and social factors influence the consumer behaviour. Personal factors deal with an individual's interests and opinion which are affected by their demographics.

2. STATEMENT OF THE PROBLEM

Consumers are beginning to resist the effect of some companies at marketing them. The promotional focus of some organizations is on the conventional mass media advert style, which includes commercial TV, radio jingles and advertisements in print format such as newspapers.

It is now on record that as the Internet is fast advancing across the global marketplace, the effectiveness of traditional mass media is fast on the decline.

3. OBJECTIVES OF THE STUDY

- To analyses the impact of social media on consumer buying behaviour.



- To study the development of trust into consumers by social media.
- To study the concept of social media.
- To study about the demographic variables of the respondents.

4. SCOPE OF THE STUDY

- ❖ The scope of this research is to focus the level of consumer buying behaviour from social media in Coimbatore city.
- ❖ Understand the behaviour of consumer and factors affecting consumer buying behaviour.
- ❖ It involves the analyzing the customer satisfaction towards social media.
- ❖ The scope of this research is ultimately to understand many features advantages of social media.
- ❖ Many progressive business owners are dabbling in social media marketing

5. RESEARCH METHODOLOGY

This study has been conducted among the customers those who are belong to the Coimbatore District of Tamilnadu, India.

RESEARCH DESIGN:

The descriptive research design was applied in the research methodology of the study.

SAMPLE SIZE:

The 120 samples are decided to selected from Coimbatore city

AREA OF THE STUDY:

Coimbatore city was the area of the study.

TOOLS TO ANALYSIS:

- Simple Percentage analysis
- Chi square
- Ranking analysis

SOURCE OF DATA COLLECTION

- Primary data
- Secondary data

PRIMARY DATA

In primary data, the data has been collected through the questionnaire. Questionnaire were filled by the respondents.

SECONDARY DATA

In secondary data was collected by going through websites, journals etc...

6. LIMITATION OF THE STUDY

- The geographical scope of the study is limited to Coimbatore city.
- The sample is confined to 120.
- The customer attitude may change in future.
- The study largely is based on the perception of the respondents.

7. REVIEW OF LITERATURE

S. Bion Aldo Syarief et al., (2015)

This study analyzed the role of social media, especially Twitter, a social networking site, in communication with friends, with respect to the buying intension for the products of student's companies at president University.

Putter (2017) concludes that an emerging focus of marketers is on the use of user generated content that is created by consumers in response to specific brands and influences the perception of other consumers. Factors that influence brand perception and intention to buy include things like views of others posted, demonstrated in social media posts.

Rob Fitzgerald (2019)



finds in his study on the impact of social media to consumer buying behaviour that consumers are 71% more likely to make a purchase based on social media referrals, 475 of purchases of youths are influenced by social media. They are also 1.6 times more likely to use digital channels to learn about new products.

8. DATA ANALYSIS AND INTERPRETATION

SIMPLE PERCENTAGE ANALYSIS

Table shows about age of the respondents using social media.

Age	No of respondent	Percentage
18-25	88	73.3
26-30	22	18.3
31-40	4	3.3
Above 40	6	5
Total	120	100

INTERPRETATION

In this above table it reveals the age of the respondents. 73.3% of them are between 18- 25years, 18.3% of them are between 26-30 years, 3.3% of them are between 31-40 years, 5 % of them are above 40 years.

Majority 73.3% of the respondents are between 18- 25 years of age.

RANKING ANALYSIS

FACTOR	1(4)	2(3)	3(2)	4(1)	TOTAL	RANK
INSTAGRAM	63	25	20	12	120	I
FACEBOOK	252	75	40	12	379	IV
YOUTUBE	32	23	50	15	120	II
WHATS APP	128	69	100	15	312	III
	40	25	31	24	120	
	160	75	62	24	321	
	40	17	42	21	120	
	160	51	84	21	316	

INTERPRETATION

In this above table shows that level of satisfaction by the 120 respondents.

Majority of the respondent's ranking I For Instagram for level of satisfaction buying on product.

CHI-SQUARE

Table shows relationship between educational qualification and social media platform.

Education qualification	Social media platform					Total
	Instagram	Facebook	YouTube	What's app	others	
School level	18	02	03	05	0	28
Ug	28	01	05	08	01	43
Pg	21	02	07	05	01	36
Others	06	04	01	02	0	13
Total	73	09	16	20	2	120



To find out the association between education qualification and social media platform level of respondent chi square test is used and result is given below.

Factors	Calculation value	Degree of freedom	Table value	Remarks
Educational qualification	14.707 ^a	12	21.026	Accepted

HYPOTHESIS

There is no significance between educational qualification and social media platform.

INTERPRETATION

It is clear from the above table shows that, the calculated value of chi-square at 0.05% level is more than the table value. hence the hypothesis is accepted .so, there is significant relationship between educational qualification and social media platforms of the respondents.

9. FINDINGS

Simple percentage analysis:

- ❖ Majority 73.3% of the respondents are between 18- 25 years of age
- ❖ Majority 71.7% of the respondents are female
- ❖ Majority 68.3% of the respondents are unmarried.
- ❖ Majority 38.3 % of the respondents are earning above 50000.
- ❖ Majority 90.8 % of the respondents yes for using social media.
- ❖ Majority 65 % of the respondents trust social media.
- ❖ Majority 50 % of the respondents are paying attention on advertisements in social media websites.
- ❖ Majority 43.3 % of the respondents said yes about social media triggers them to buy a product.
- ❖ Majority 33.3 % of the respondents purchased almost everything currently on social media.
- ❖ Majority 38.3 % of the respondents agree with increasing knowledge regarding products on social media.
- ❖ Majority 39.2 % of the respondents present brand is important on social media.
- ❖ Majority 38.3 % of the respondents will like or follow them preferred brand on social media.

Ranking analysis

- Majority of the respondents' level of satisfaction of buying product is Instagram ranking I.

Chi-square

There is no significance between education qualification and social media platform.
There is no significance between occupation and time spend on using social media.

10. SUGGESTION

- Consumers feels that the privacy policy to be secure in social media.
- Some of the consumer feels that wrong type of brand advertisements should be avoided.
- Maximum students and youngsters are highly dependent on social networking sites for indirect interaction.
- Peoples are highly motivated to use social networking sites to learn about new and useful things.
- Social media platforms have broken through the barriers and created a perfect way for starting.
- Don't reply to unknown sources and stranger links.

11. CONCLUSION

The study was conducted to assess the impact of social media in consumer buying behaviour in Coimbatore city.

At the end findings obtained from this research, the consumers are mostly affected by informational and design factors which lead them to take the best decision in choosing the most suitable Social Media site to buy their preferred product.

The study also concluded that social media tools allow for one to voice their opinion after a purchase has been made and to review a product expectation and performance after buying.



REFERENCES

1. *Elham Al- Mukhaini (2014), "The impact of social media on consumer buying behaviour", Sultan Qaboos*
2. *D. Voramontri & L. Klieb (2018), "Impact of social media on consumer behaviour", international journal information & decision sciences,*
3. *Micheal Putter (2017), "Impact of social media on consumer buying intention", journal of international business research & marketing,*
4. www.statista.com
5. www.searchenginejournal.com
6. www.google.com



THE IMPACT OF INSURGENT ACTIVITIES ON GOVERNMENT SENIOR SECONDARY EDUCATION IN BORNO AND YOBE STATES

Prof. C. E. Edemenang

School of Education, Federal College of Education Technical Gombe

DR. A. Garba

School of Education, Federal College of Education Technical Gombe

DR. M. M. Mande

School of Education, Federal College of Education Technical Gombe

Danladi, Jagula Msheliza

School of Education, Federal College of Education Technical Gombe

ABSTRACT

This study was on the impact of insurgent activities on government senior secondary education in Borno and Yobe States. Two purpose of the study with two corresponding research questions and hypotheses guided the study. Descriptive survey research design was adopted for this study. The population comprised of 2600 teaching staff and 276 administrators for Borno and 957 teaching staff and 123 administrators for Yobe State. The sample was randomly selected among the senior secondary schools in those areas while the sampling technique used was proportionate stratified sampling. The instrument used for data collection was “Impact of Insurgents’ Activities on Senoir Secondary Schools in Borno and Yobe States Questionnaire (IIASSBYQ)”. The reliability of the instrument was .825. The findings of the result revealed that Students were reluctant to go school for fear of insurgency (.768). Also, the coefficient of influence of insurgency activities on students enrolment reveal that forceful recruitment of student as child soldiers and suicide bombers by insurgency lower enrolment in my school (.817). Conclusions and recommendations were made among which are Government and other Education authorities should ensure that their institutions have adequate teaching and learning facilities that will improve teaching and learning activities and encourage more enrolment, attendance and commitment of both teachers and students.

INTRODUCTION

Despite the increased campaigns and formulation of policies to encourage students’ enrollment in schools, retention and completion of school, still the overall learning process of students and the completion of education among senior secondary school students in north eastern States is not that great. However, the government has continued to invest heavily in improving both the

access and quality of education, in an effort to realize the promise of education as well as to achieve the education-related Millennium Development Goals. However, Quality education is depending largely on encouragement from families in the society, provision of school instructional materials and safety. Insurgent has become a threat to many families and students in north eastern States. There are frequent cases of kidnaping, abduction and attack on schools,



students, teachers and administrators of schools in the region. As a result, the Borno state government had to close 85 schools thereby affecting nearly 120,000 students. Joda & Abdulrasheed (2015) stated that majority of the schools have been closed indefinitely while most primary and secondary school teachers working in affected areas had escape during series of attack on their communities.

The closure has a consequential effect not only on the students, but the nation as a whole, as the educational administrators themselves are at a lost as to where to channel the resources earmarked for education which is either being diverted or misappropriated since most of the schools were either destroyed, some teachers and other school workers were killed and survivors had to desert the affected area for safety. With the desolate and pathetic conditions of schools in Borno State, one wonders what the resultant consequences or implications this negative development has on not only the schools in Borno state, but also its effects and implications for the entire educational stakeholders (students, teachers, parents and the educational administrators/policy makers).

Since the tendency of accessing to quality education, enrolment, retention and completion are strongly affected by insurgents' activities in the region, this study aims at investigating impact of insurgents' activities on enrolment, retention and completion of senior secondary school in the area. A better understanding of that will allow for more informed decisions about today's senior secondary education administration in insurgent affected area.

STATEMENT OF THE PROBLEM

Despite the increased campaigns and formulation of policies to encourage students' enrollment in schools, retention and completion of school, still the overall learning process of students and the completion of education among senior secondary school students in north eastern states is not that encouraging (Joda,2014). However, the government has continued to invest heavily in improving both the access and quality of education, in an effort to realize the promise of education as well as to achieve the education-related Millennium Development Goals. However, Quality education depends largely on encouragement from families in the society, provision of school instructional materials and safety. Insurgency has become a threat to many families and students in north eastern states of Nigeria. There are frequent cases of kidnaping, abduction and attack on schools, students, teachers and administrators of schools in the region. According to Joda and Abdulrahseed (2015) Borno state government had to close 85 schools thereby affecting nearly 120,000 students. Joda and

Abdulrasheed (2015) stated that majority of the schools have been closed indefinitely while most primary and secondary school teachers working in affected areas had escaped during series of attack on their communities.

Similarly, Adesoji, Adelaja, Abdullahi and Eva (2018) investigated the Public Opinion on the Root Causes of Terrorism and Objectives of Terrorists: A Boko Haram Case. Since about the year 2009, Boko Haram, a territorial terrorist organization, has wreaked havoc on communities in Northeast Nigeria and beyond. Significant debate has ensued about the reasons for the Boko Haram insurgency and their objectives. The government's response to Boko Haram has largely focused on the need to stamp out the insurgency through strong military response and heightened activities in intelligence and security agencies. Some have espoused the Countering Violent Extremism (CVE) approach of mounting strategies that at least recognize the root causes of the problem and the angst amongst citizens that contribute to their decision to support terrorist organizations. In this article, they investigated public opinion about the root causes of terrorism and the objectives of terrorists. The results suggest that the majority of the public agree with the following: (1) the root causes of Boko Haram are unemployment, poverty and economic problems, dislike for government, extreme political ideology, extreme religious feelings and manipulation by some politicians; and (2) a major objective of Boko Haram is to seek revenge against security forces. However, more respondents disagreed than agreed about the following objectives of Boko Haram: fighting political inequality, fighting economic inequalities, and addressing political imbalance. Given these findings, it appears there is divergence in public opinion about Boko Haram and that some aspects of public opinion differ from perspectives held by government agencies.

The relevance of this study to the present one is that both the previous and the present studies are on Boko Haram Insurgency. The previous study is also relevant to the present study because it touches on the issues of concern in the present study such as reasons for the insurgent activities and the Boko Haram attacks. The gap to fill in this study is that the previous study was conducted in the North East and beyond while this one is in Borno and Yobe States.

Moreso, the National Bureau of Statistics (NBS) in 2010 affirms that national unemployment rate was 21.1 percent of the labour force (NBS, 2010). It showed that 112, 519 million Nigerians live in relative poverty conditions, out of an estimated population of 163 million. Furthermore, the absolute poverty measure puts the country's poverty rate at 99.284 million or 60.9%. The dollar per day



measure puts poverty rate at 61.2% and subjective poverty level at 93.9%. Significantly, the North-West and North-East, recorded the highest poverty rates in the country in 2010, with 77.7% and 76.3% respectively (Idahosa, 2016). This situation had been on the increase and since 'good life' seems unattainable, the members of Boko Haram may have opted for insurgency to find solace.

The closure has a consequential effect not only on the students, but the nation as a whole, as the educational administrators themselves are at a loss as to where to channel the resources earmarked for education which is either being diverted or misappropriated since most of the schools were either destroyed, some teachers and other school workers were killed and survivors had to desert the affected areas for safety, which lead to many of them losing their jobs as teachers. With the desolate and pathetic conditions of schools in the States, one wonders what the resultant consequences or implications this setback had, not only the schools in Borno and Yobe states, but also its effects and implications for the entire educational stakeholders (students, teachers, parents and the educational administrators/ policy makers) in the nation.

In the same vein, Ugwumba and Odom (2015) conducted a study on Boko Haram Insurgency: A peril to the achievement of education for all in Nigeria. The study concentrated on the North-East Nigeria with primary focus on Borno State. The study also x-rayed the Boko Haram's attacks on education since 2012 till date and the effects of these attacks on education and the possible solutions to halt further attacks. Three research questions and three hypotheses guided the study. Ex-post-facto design was adopted for the study. The population of the study comprised 6,788 inhabitants of the area affected by Boko Haram insurgency in Borno State. A sample of 290 elite groups of the inhabitants was used for the study. The stratified random sampling technique was used for the selection of the sample size. A questionnaire developed by the researchers and interviews were used for data collection. Mean and standard deviations were used to answer research questions and ANOVA to test the hypotheses at 0.05 level of significance. The findings were that the activities of Boko Haram insurgency negatively affected students' education, enrolment or attendance, teachers and teaching and school infrastructure. It was recommended that the federal government should take effective and lawful measures to prevent unlawful killings, particularly those of teachers and students, as well as attacks on schools by Boko Haram and other armed groups in Northern Nigeria. The relevance of this study to the present study is that, both studies investigated the activities of Boko Haram Insurgency as it affects education. Variables covered in the previous study

such as falling enrolment or attendance of students, teachers and teaching and school infrastructure are also variables addressed in the present study are student's enrolment, retention and completion. Also the relevance of this study to the present study is that, both studies conducted in Borno State, Nigeria though this one included Yobe. The previous study addressed variables such as: falling enrolment or attendance of students, teachers and teaching and school infrastructure while the present study focused on eight variables namely: funding, loss of human lives, infrastructural facilities, school records, school calendar, enrolment, students' and staff's attendance and teaching and learning. Ex-post factor design was adopted in the previous study while the present study will use descriptive survey design. In the previous study, mean and standard deviations were used to answer research questions and ANOVA to test the hypotheses at 0.05 level of significance, while the present study will use mean and standard deviation to answer research questions and z-Test independent sample for testing the hypotheses at 0.05 level of significance.

The problem of Insurgency on Education in Borno and Yobe states can be summed up to include: low enrolment and attendance of students, shortage of teachers and teaching materials as well as infrastructure facilities, recruitment of school children as soldiers. These problems can be vividly seen in Borno and Yobe states in that all of them have manifested practically for everybody to see.

The insurgency causes a lot of killing and maiming of human beings and destruction of school facilities. These made both teachers and students to run in order to save their lives. These incidences led many students to stop attending schools. Parents who have children of secondary school age were scared to send their children to school due to the fear of being seized or killed by Boko Haram. This situation can lead to low enrolment of new intake in secondary schools. Those who were already enrolled in school were terrified and have no interest because they saw their classmates being killed in their presents. This may make them lose interest in attending schools and prefer to drop out of school and save their lives than to remain and be killed. Some of the students who left school became idle at home. Their idleness and stage of poverty may probably lead those with weak mind into joining the insurgency group to fight for them for just some miserable amount of money. This may be one of the reasons most of the students were unable to complete their secondary school education. The activities of the insurgencies sent fear in the minds of teachers and school administrators which are likely the reason that makes some of them to resign their services as teachers.

These realities prompted this researcher to investigate the activities of the insurgency as it



affects school enrolment, retention, attendance and completion. To the best of the researcher's knowledge, no study has been conducted on the impact of insurgent activities on government senior secondary education in Borno and Yobe states. It is in view of this that the researcher aims at filling this gap in Borno and Yobe States respectively.

PURPOSE OF THE STUDY

This research is an appraisal of insurgent activities on senior secondary schools in Borno State and its implications on enrolment, and great retention. Specifically, the study intends to:

1. Explore extent to which insurgent activities affects students' completion rate in senior Secondary education in Borno and Yobe States.
2. Establish the extent of the influence of insurgent activities on students' attendances in Senior Secondary education in Borno and Yobe States.

RESEARCH QUESTIONS

1. What is the effect of insurgent activities on students' completion of Senior Secondary Schools in Borno and Yobe States?
2. What is the effect of insurgent activities on students' attendances in senior Secondary in Borno and Yobe States?

Hypotheses

Ho:1. There is no significant relationship between the perception of large school teachers and that of small school teachers on how insurgent activities affect students retention in Senior Secondary Schools in Borno and Yobe States.

Ho:2. There is no significant relationship between the perception of public school teachers and that of private school teachers on the effect of insurgent activities on student's completion in Senior Secondary School in Borno and Yobe States.

METHODOLOGY

Research Design

Descriptive survey research design was adopted. The design is chosen because the study will seek information from the respondents as the situation exists without manipulation of any variable. This survey design is also chosen because it is suitable and reliable for this research since it involves investigation of facts that could be studied in other researches. It is also suitable and reliable in collecting information from a representative group and based on such information inferences are drawn about the behaviour of the entire population.

Area of the study

The area in which the study was conducted was Borno and Yobe states. Borno state shares borders with Gombe, Yobe and Adamawa states,

while Yobe state has borders with Gombe, Bauchi, Borno and Jigawa states. Borno state also share boarder with Cameroon, Chad and Niger republic while Yobe shares borders with Chad and Niger in the international front. Borno has the largest land mass among the states of Nigeria (69,435 square kilometres). It has two distinct climates which are the dry season (November – March) and the rainy season (April - October) with an average rainfall of 850mm. The most dominant tribe is kanuri and most of the populace are farmers, fishermen or herdsmen. Yobe has a land mass of 45,502 km² with the same climatic environment as that of Borno and an average rainfall of 603mm/23.7 inch.

Population of the Study

Borno state has four education zones comprising of Maiduguri, Gwoza, Biu and Monguno. These zones have 28, 29, 20 and 15 schools respectively making up 92 schools in the state. Yobe on the other hand has three education zones comprising of Damaturu, Gashua and Potiskum zones and each zone has 9, 13 and 19 schools respectively. According to a brief by the Borno state Teachers Service Board, there are 92 Secondary schools in the state with 3142 operative staffs among which 2600 are teaching staffs and 276 administrators. Yobe state has 41 schools with 44,178 numbers of students and 957 numbers of teaching staffs and 123 administrators.

Sample and Sampling Techniques

Three sampling techniques was used in selecting sample for this study as thus; proportionate Stratified random sampling technique was used in selecting a sample teachers of 357 based on the table for determining sample size (Research Advisor, 2006). Disproportionate stratified sampling techniques will be used in selecting 26 administrator according to the table for selecting sample size (Research Advisor, 2006). The purposive sampling techniques will be used in selecting 13 secondary schools of which 6 from Borno and 7 from Yobe states respectively. .

Therefore since the total number of teachers is 5086 and that of the administrators is 399, s and 26 administrators will be randomly selected from the senior secondary schools in Borno and Yobe States using the percentage of each from the sample number given.

Instrument for Data Collection

The instrument for data collection is a questionnaire designed by the researcher based on extensive reviewed literature. The researcher developed research questionnaire titled "Impact of Insurgents' Activities on Senior Secondary Schools in Borno and Yobe State Questionnaire (IIASSBYQ)" The questionnaire is designed to elicit information from the administrators and teachers based on their perception on the Impact of



Insurgents' Activities on Senior Secondary Schools in Borno and Yobe States. The instrument consists of two sections. Section 'A' contained demographic information of the respondents. Section 'B' contained five items comprising fifty five (55) questions. Eleven questions were asked for each of the research questions. The response to the items in the questionnaire was scaled using a modified 4 point response scale, which include 4= Very Large Extent (VLE), 3= Large Extent (LE), 2= Small Extent (SE), and 1= Very Small Extent (VSE). The maximum score of the instrument is 220 while the minimum score is 55 the total score for each items will be taken as the index assessment for the impact of insurgency activities on teachers and school administrators in Borno and Yobe States respectively. The mean score of (2.5) and above for each scored item will be used to indicate agreement or acceptance with the statement on the item, while mean score less than (2.5) will be disagreed or rejected statement on the item.

Pilot Study

A pilot study was conducted to pre-test the draft research tools in the field before the actual data collection starts in this case Mugenda and Mugenda (2012) argue that Piloting of data collection instruments is the most important stage of questionnaire design because it reveals what works and what doesn't, such as vague questions and unclear instructions. Specifically, in this study the researcher conducted Pilot study in Adamawa state. Adamawa state is chosen because it one of the state affected insurgent activities and it is out of area of the study. Fifty teachers were randomly selected for this purpose. Therefore in this study pilot study serve as tool for testing reliability and validity of the instrument.

Validity of the Instruments

Validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (Babbie and Mouton, 2017). Validity is thus an indication of the extent to which results obtained in a study are a true reflection of what is real and whether the findings can be generalized beyond the sample used. The instrument was validated by three experts in educational administration and planning and one expert in test and measurement from Department of Educational Foundations, Abubakar Tafawa Balewa University, Bauchi. Their corrections, criticisms and suggestions was used in modifying the instrument.

Reliability of the Research Instruments

Reliability is concerned with the question of whether the results of a study are repeatable.

The range of Cronbach's alpha (α) normally is between 0 and 1. Surya and Sushil (2016) had provided the rules of thumb e. i. if the value of alpha is >0.9 = Excellent, >0.8 = Good, >0.7 = Acceptable, >0.6 = Questionable, >0.5 = Poor, and <0.5 = Unacceptable., in doing this the quantitative data obtained from the questionnaire were coded for statistical analysis using the Statistical Package for Social Sciences (SPSS) because it is able to handle large amount of data. After completion of data entry, was cleaned to ensure that there are no outliers or improper entries which might contaminate the findings and then the data have been analysed using SPSS 21 Version.

Result of the Reliability of the Research Instruments

The result of the reliability test of the constructs as documented in Table reveals that the Cronbach's alpha coefficients of all the constructs are greater than .70 recommended as good level (Surya and Sushil 2016). Furthermore the Cronbach's alpha coefficients of cluster is .782 which is also greater considered as accepted.

RESULTS

Table 1.2:- Result

S/N	Research Questions	Mean	SD	Remarks
1	To what extent do insurgent activities influence communities' access to senior Secondary schools in Borno and Yobe States?	3.50	4.67	Accepted
2	To what extent do insurgent activities affect enrolment in senior Secondary school in Borno and Yobe States?	3.50	5.052	Accepted
3	How does insurgent activities affect students' retention in Senior Secondary Schools in Borno and Yobe States?	3.464	5.430	Accepted

The result on table 1.2 shows the respondents' views of The Impact Of Insurgent Activities On Government Senior Secondary Education In Borno And Yobe States. The results reveals that the impact of insurgency activities are known in Borno and Yobe States with a cluster mean (\bar{x}) of 3.50 and standard deviation of 4.67 for the first research question. The result on the basis research question two also shows a (\bar{x}) of 5.50 with standard deviation of 5.052. The remaining 2 research questions have the respondents mean (\bar{x}) ranging from 3.520 - 3.464 with standard deviation ranging from 5.430 – 4.656. The result implies that the respondents agreed on all the items.

**Table 1.1:- Influence of Insurgency Activities on Students Completion**

S/N	Research Questions	Mean	SD	N	Cronchach's Alpha	Remark
1	As a result of insurgent activities school facilities such as libraries, equipment etc. have been destroyed.	3.32	.768	50	.864	Good
2	Due to Insurgent activities students rarely complete their studies.	3.50	.863	50	.777	Accepted
3	Insurgent activities cause increases truancy and absenteeism.	3.44	.760	50	.736	Accepted
4	Insurgent activities cause large school size and that affect students' ability to concentrate.	3.34	.939	50	.796	Accepted
5	Insurgent activities increase influence of peer group which lead to decrease in school completion rate.	3.32	.868	50	.802	Good
6	Since both teachers and students are targets of incessant attack students drop out of schools.	3.68	.621	50	.778	Accepted
7	Since Insurgent activities affect everything including income, some parents find it difficult to pay their children's' school fees and learning materials	3.52	.646	50	.777	Accepted
8	Since insurgent attack schools, schools materials are inadequate which contributes to students' poor attendance.	3.68	.621	50	.810	Good
9	Since insurgent attack their target indiscriminately, students boycott schools for the fear of abduction.	3.64	.663	50	.791	Accepted
10	The value of education is affected as students' completion decline due to insurgent activities.	3.76	.591	50	.778	Accepted
11	Insurgent recruit the school children which make the drop-out of school.	3.52	.646	50	.768	Accepted

However, the result of the reliability test of the constructs as documented in this Table revealed that the Cronbach's alpha coefficients of item 1,4 ,5 ,8 and 11 are at good level with Cronbach's alpha of .805,.828, .804,.827 and .832 respectively. However,

item 2,3,6,7,9 and 10 are at Accepted level. r with Cronbach's alpha of .777, .760,7.82, .783.,797and .782, respectively. The Cronbach's Alpha for the cluster is.812 while the Cronbach's Alpha Based on Standardized Items .790 the number of item is 11.

Table 1.2:- Influence of Insurgency Activities on Students Attendance

S/N	Research Questions	Mean	SD	N	Cronchach's Alpha	Remark
1	Students are reluctant to go to school for fear of insurgents.	3.54	1.054	50	.805	Good
2	Communities migrated to safer location which precipitated non-attendance by students.	3.06	.767	50	.777	Accepted
3	Road leading to school are considered insecure which lead to non-attendance by students.	3.18	1.137	50	.760	Accepted
4	Most students are traumatized as a result of	3.44	.733	50	.828	Good



	insurgent activities which affect students' attendance to school						
5	Insurgent activities brought about huge damages to school buildings which in turn retarded students' attendance.	3.82	.388	50	.804		Good
6	The value of education is affected as students' attendance declined due to insurgent activities	3.20	.639	50	.782		Accepted
7	Abduction of school children by insurgents affect students' attendance to school.	3.46	.734	50	.783		Accepted
8	Students are unable to go to school as result of distance and no means of transportation.	3.86	.351	50	.827		Good
9	Destruction of school infrastructural facilities affect students' attendance to education.	3.86	.351	50	.797		Accepted
10	Closure of school as a result of Insurgent activities denied students attendance to school.	3.20	.639	50	.782		Accepted
11	Insurgent activities prompted nonattendance which brought about poor performance.	3.82	.388	50	.832		Good
12	Cronbach's Alpha				.812		
13	Cronbach's Alpha based on standardized item				.790		

The result of the reliability test of the constructs as documented in this Table revealed that the Cronbach's alpha coefficients of item 1,4,5,8 and 11 are at good level with Cronbach's alpha of .805, .828, .804, .827 and .832 respectively. However, item 2,3,6,7,9 and 10 are at Accepted level. r with Cronbach's alpha of .777, .760, .782, .783, .797 and .782, respectively. The Cronbach's Alpha for the cluster is .812 while the Cronbach's Alpha Based on Standardized Items .790 the number of item is 11.

DISCUSSION OF FINDINGS

The study revealed Cronbach's Alpha coefficient reliability on influence of insurgency activities on students completion, the result of each statement is as follows: As a result of insurgent activities school facilities such as libraries, equipment etc. have been destroyed (.864) Due to Insurgent activities students rarely complete their studies (.777), Insurgent activities cause increases truancy and absenteeism (.736) Insurgent activities cause large school size and that affect students' ability to concentrate (.796), Insurgent activities increase influence of peer group which lead to decrease in school completion rate (.802), Since both teachers and students are targets of incessant attack students drop out of schools (.778), Since Insurgent activities affect everything including income, some parents find it difficult to pay their children's school fees and learning materials (.777), Since insurgent attack schools, schools materials are inadequate which contributes to students' poor attendance (.810), Since insurgent attack their target indiscriminately,

students boycott schools for the fear of abduction (.791), The value of education is affected as students' completion decline due to insurgent activities. (.778), Insurgent recruit the school children which make the drop-out of school (.768) the Cronbach's Alpha for the cluster is (.798). going by this finding the draft item is this cluster is considered to be acceptable as recommended by Scholars like Gliem & Gliem.(2018), Babbie and Mouton (2017), Surya K and Sushil (2016), Cortina, (2015) Dede, (2015).

Finding of the study also revealed significant reliability and internal consistency as indicated by Cronbach's alpha coefficient in the items under cluster: influence of insurgency activities on student's attendance, the result reveal the following: sstudents' are reluctant to go to school for fear of insurgents. (.805), Communities migrated to safer location which precipitated nonattendance by students (.777), Road leading to school are considered insecure which lead to nonattendance by students (.760) most students are traumatized as a result of insurgent activities which affect students' attendance to school (.828), Insurgent activities brought about huge damages to school buildings which in turn retarded students' attendance (.804), The value of education is affected as students' attendance declined due to insurgent activities (.782), Abduction of school children by insurgents affect students' attendance to school (.783), Students are unable to go to school as result of distance and no means of transportation (.827), Destruction of school infrastructural facilities affect students' attendance to education (.797), Closure of school as a result of



Insurgent activities denied students attendance to school (.782) and Insurgent activities prompted non-attendance which brought about poor performance (.832). While Cronbach's Alpha for the cluster is (.812). in view of the above the draft item in this cluster are considered to good as recommended by Scholars like Gliem &, Gliem.(2018), Babbie and Mouton (2017), Surya K and Sushil (2016), Cortina, (2015) Dede, (2015).

CONCLUSION

Based on the results that were found in the pilot study, it was concluded that IIAGSSEBYSQ consist of five clusters and each cluster has eleven items. Each item has the minimum requirement for being acceptable for research assessment according to the research findings of the pilot study. Therefore, the reliability and validity of the instrument is good, hence the instrument obtained .808 which signify good reliability.

Recommendations

- i. Government and other Education authorities should ensure that their institutions have adequate teaching and learning facilities that will improve teaching and learning activities and encourage more enrolment, attendance and commitment of both teachers and students.
- ii. Workshops on security and conflict resolutions should be mounted for teachers, school administrators and school communities. School Heads should enhance effective communication with all stakeholders in the school to minimize causes of conflict and ensure safe learning environment.
- iii. Government should apprehend and prosecute anybody found guilty for being directly or indirectly responsible for the devastating insecurity across the country in accordance to the law.

REFERENCES

1. Adesoji, A. O., Adelaja, C.C., Abdulahi, E. S & Eva, M. B. (2018). *Effects of Boko Haram on Universal Basic Education in Borno State. American Journal of Educational Research* 2(1) 56-74.
2. Babbie, E. & Mouton, J. (2017). *The Practice of Social Research. Cape Town: Oxford University Press.*
3. Cortina, J. M. (2015). *What is coefficient alpha? An examination of theory and applications.*
4. Dede, C. (2015). *Planning for Neomillennial Learning Styles: Implications for Investments in*
5. Gliem, J. A. & Gliem, R. R. (2018). *Calculating, interpreting, and reporting Cronbach's Alpha*

Reliability Coefficient for Likert-type Scales. Midwest research to practice conference in adult, continuing, and community education. Available at <http://hdl.handle.net/1805/344>.

6. <http://www.educause.edu/research-andpublications/books/educating-netgeneration/>
7. Idahosa, O. (2015). *Boko Haram and the Nigerian State: A Different Perspective. Glocalism journal of culture, politics and innovation. Issue 2015. 3. ISSN 2283-7949*
8. Joda, F. M. and Olowoselu, A. (2015). *Effects of Insurgency on Girls Education in North Eastern Nigeria: European Journal of Education and Development Psychology. Published in UK by European Centre for Research Training and Development. 3 (1):44-50 Journal of Applied Psychology, 98-104. planningneomillennial-learning-styles-implicationsinvestments-tech*
9. Surya, K. N. & Sushil D.R.(2016). *Calculating and interpreting Cronbach's alpha using Rosenberg assessment scale on paediatrician's attitude and perception on self esteem International Journal of Community Medicine and Public Health* 3(6):1371-1374 available at: <http://www.ijcmph.com> Technology and Faculty. Educause.edu. [online] Retrieved January 2, 2021, from:
10. Ugwumba, E. U & Odom, T. C (2015). *Boko Haram Insurgency: A peril to Achievement of Education for All in Nigeria. International Journal of Education, Learning and Development , 1-11.*



A REDUCED SWITCH THIRTEEN LEVEL INVERTER FOR PHOTOVOLTAIC APPLICATIONS

Mr.A.VinothKumar¹

¹Assistant Professor EEE, P A College of Engineering and Technology. Pollachi

Dr.S.Vijayabaskar²

²Head of the Department, EEE, P A College of Engineering and Technology. Pollachi

Ms.C.Selsiya³

³Assistant Professor EEE, P A College of Engineering and Technology. Pollachi

Article DOI: <https://doi.org/10.36713/epra6933>

DOI No: 10.36713/epra6933

ABSTRACT

The demand for clean and sustainable energy has prompted research into all types of renewable energy sources, including solar energy generated by photovoltaic systems. We suggest a new multi level inverter topology in this paper. This paper looks at a PV-based 13-level multi level inverter with fewer switches. The most gainful power converters for high power applications and modern applications with fewer switches are multi level inverters. PWM methodology is used to manage the proposed topology. The proposed topology has one of the highest efficiency and lower voltage THD. The inverter produces output voltage in thirteen levels: V_{dc} , $V_{dc}/2$, $V_{dc}/3$, $V_{dc}/4$, $V_{dc}/5$, $V_{dc}/6$, 0, $-V_{dc}$, $-V_{dc}/2$, $-V_{dc}/3$, $-V_{dc}/4$, $-V_{dc}/5$ and $-V_{dc}/6$. The validity of the proposed inverter is verified through simulation.

KEY WORDS: Pulse Width modulation (PWM), Photo Voltaic (PV) Source.

1. INTRODUCTION

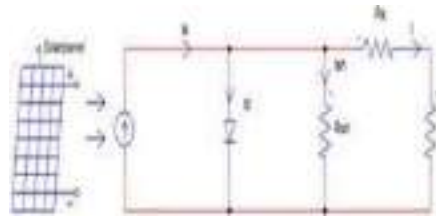
The PV inverter, the brains of a PV system, converts dc power from PV modules into ac power that can be fed into the grid. The size of the filter used and the degree of Electromagnetic Interference (EMI) produced by switching operation of the inverter are reduced when the output waveform of the inverter is improved. Because of their advantages over traditional PWM inverters, multi level inverter have become more appealing to researchers and manufacturers in recent years.

They have better output waveforms, a smaller filter size, and lower EMI as well as lower Total

Harmonic Distortion (THD)[1].

2 PHOTOVOLTAIC SYSTEM

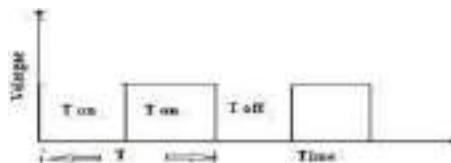
The DC supply from the solar panel is used to power this multi level inverter. For example, a 10 watt panel has a voltage of 17.6 and a current of 0.56A. A solar cell is the most basic part of a solar PV system. Solar modules are made up of solar cell assemblies. Solar panels and sun-based boards are made up of a large number of solar modules. Figure 1 demonstrates the corresponding circuit for a photovoltaic module.

**Fig1. Equivalent circuit of solar panel**

This sun-oriented cell has little to do with the inverter and diode that are connected in parallel. This current source is said to be parallel to the diode and shunt resistance. I_d -Diode current, I_s -dispersion current, T -incomparable temperature Boltzmann compatible ($1.38051023J/K$), Charge $q = 1.6 \cdot 10^{19} C$ are the yield curves of the sun-

oriented cell. Regarding the fabricate misfortunes, the PV cell's identical circuit consists of two resistances R_s and R_p connected in series and parallel, where R_s represents the misfortunes caused by contacts and interactions and R_{sh} represents the spillage streams in the diode as defined.

3 PULSE WIDTH MODULATION

**Fig2. Pulse width modulation Technique of the proposed system**

As seen in figure 2, the Pulse creator is depicted as the turn ON time for the entire day and era, which is referred to as the duty stage. To send the message pulse to the Switches, central pulse plan frame works were used. The ON time is constant in relation to the total voltage conveyed. The switch movement encircles the beats to create a ventured waveform. In this case, 8 switches are switched on to create a 13-level yield waveform [4]. The beat generator uses an OR entry way to create positive voltage waveforms, while an invert gate delivers negative voltage ventured waveforms. Giving the power the entry way pulse is an important technique.

4 CONVENTIONAL SYSTEMS

The traditional 13-level inverter is depicted in the diagram. There are three series. One dc source is connected to seven capacitors and six switches in the traditional topology, as well as one

H-bridge with four switches. This circuit uses ten switches in total to produce a thirteen-level output voltage waveform, and it employs a time frame switching scheme to generate output voltage with a sine wave as a reference. In the conventional method, each stage of the output voltage can be obtained by adding and reducing the capacitor in the thirteen level inverter.

This can be tested and tentatively verified using a tangle lab reenactment. The switches in this system are enabled by a Sinusoidal heartbeat width balance. The sinusoidal Pulse balance was generated by contrasting reference and vocation flags, and we have considered inverter topology just as it is discussed in. The H-one extension's leg can be removed from this structure, and the proposed framework will be discussed in the following chapter.

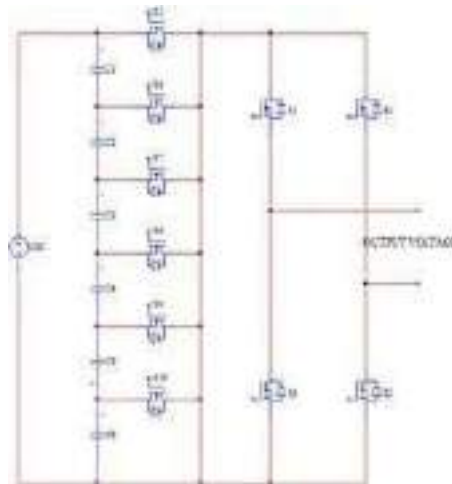


Fig.3. Conventional Thirteen level Multi level inverter

5 PROPOSED SYSTEM

The figure depicts a PV-based 13-level symmetric Multi level inverter. The proposed topology has eight switches, while traditional topologies have ten, making this circuit's thermal stress and operating time superior to conventional systems. The switches in this system are switched using simple pulse width modulation. The proposed inverter has a better total harmonic than traditional systems. The PIC30f2010 microcontroller is used to produce pulses for switches.

Since the carrier has a fixed duration, the

switches have a fixed switching frequency. The crossing of the carrier and the modulating signal determines the switching moment

The inverter's switching operation is shown in table 1. V_{dc} , $V_{dc}/2$, $V_{dc}/3$, $V_{dc}/4$, $V_{dc}/5$, $V_{dc}/6$, 0 , $-V_{dc}$, $-V_{dc}/2$, $-V_{dc}/3$, $-V_{dc}/4$, $-V_{dc}/5$, and $-V_{dc}/6$ are the voltage levels in the truth table. The switches' switching operation for the above voltage levels will be on (1) or off (0) depending on the input needed. The input for the pulse width modulation technique can be given as shown in table 1. on and off can be managed based on the performance required[8].

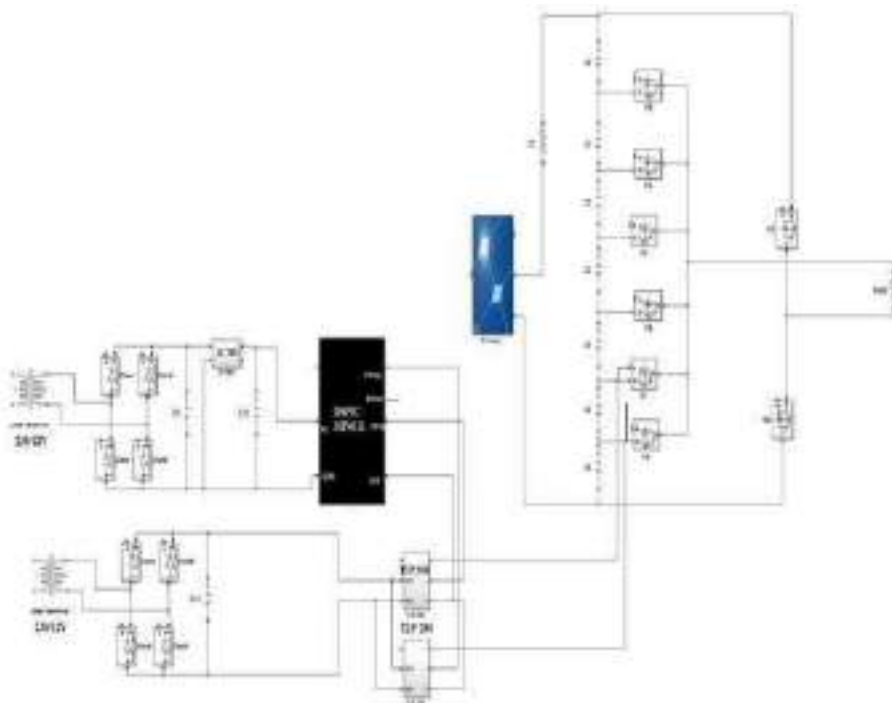


Fig.4. Proposed Multi level inverter

Table.1 Truth table for the multi level inverter

LEVELS	S1	S2	S3	S4	S5	S6	S7	S8
V _{dc}	0	1	0	0	0	0	0	1
2V _{dc}	0	1	0	0	0	0	1	0
3V _{dc}	0	1	0	0	0	1	0	0
4V _{dc}	0	1	0	0	1	0	0	0
5V _{dc}	0	1	0	1	0	0	0	0
6V _{dc}	0	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0
-V _{dc}	1	0	1	0	0	0	0	0
-2V _{dc}	1	0	0	1	0	0	0	0
-3V _{dc}	1	0	0	0	1	0	0	0
-4V _{dc}	1	0	0	0	0	1	0	0
-5V _{dc}	1	0	0	0	0	0	1	0
-6V _{dc}	1	0	0	0	0	0	0	1

6 RESULTS AND DISCUSSION

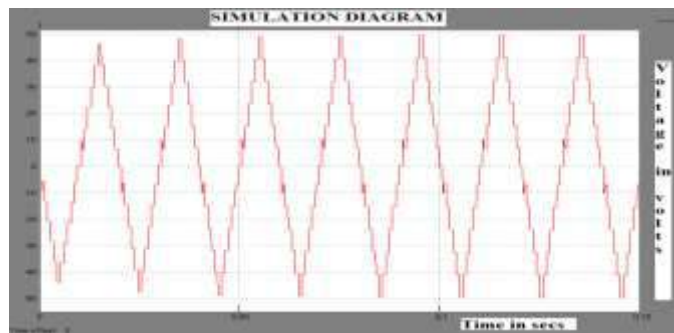


Fig.5 Simulation result for multi level inverter

The proposed inverter developed 13 level stepped waveforms (V_{dc}, V_{dc}/2, V_{dc}/3, V_{dc}/4, V_{dc}/5, V_{dc}/6, 0, -V_{dc}, -V_{dc}/2, -V_{dc}/3, -V_{dc}/4, -V_{dc}/5, -V_{dc}/6)

based on the simulation of PV based multi level inverter.

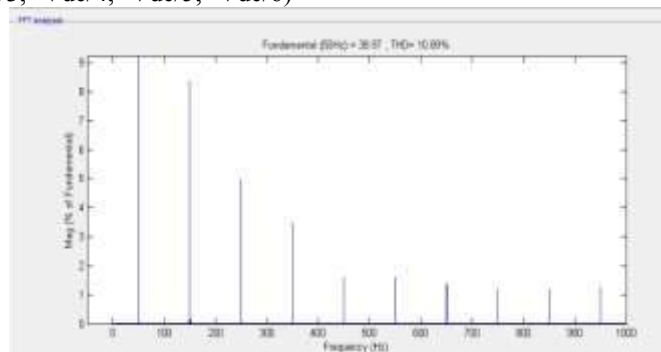


Fig.6 THD Analysis of Proposed Inverter

The proposed thirteen-level multi-level inverter has a total harmonic distortion of 10.89 percent, which is lower than a traditional inverter.

7 EXPERIMENTAL SETUP

The prototype model of multi level inverter as shown in figure. The solar panel is used to give DC



supply to the inverter. The 13-level output is obtained from Digital CRO.

Here, we use DSPIC to generate PWM in accordance with our style. To switch on the PIC, we'll need a 5V supply. We use a 230/12V, 1A phase down transformer to step down the grid voltage to 12V AC, then we use a bridge rectifier circuit to convert this 12V AC to 12V dc, and finally we use an IC7805 to convert this 12V dc to 5V dc, and finally we supply this

supply to the PIC.

We want a 12V-20V magnitude pulse to turn on the gate of the Mosfet (IRF840), so we used TLP 250 Driver circuit to give 12V DC supply and the 5V pulse that we produced in the PIC, so it will amplify the 5V pulse to 15V Pulse that we will give to the Mosfet. So here we use 8 Mosfet switch, so we need 8-TLP 250 Driver circuit.



Fig.7. Prototyped model of PV based 13 level inverter

8 CONCLUSION

Using PWM Technique, a 13-level inverter with less switch expertise is proposed in the proposed methodology. The proposed multi level inverter uses only eight switches to generate a 13-level output waveform from a single DC source, and it can also be used as part of a renewable power source. The proposed multi level inverter was simulated using Mat lab.

9 REFERENCES

1. S. Daher, J. Schmid, and F. L.M. Antunes, "Multilevel inverter topologies for stand- alone PV systems," *IEEE Trans. Ind. Electron.*, vol. 55, no. 7, pp. 2703–2712, Jul. 2008.
2. Kaliamoorthy. M, Sekar R.M., and Rajaram.R, "A new single-phase PV fed five-level inverter topology connected to the grid" *IEEE Trans.communication control and computing technologies*.pages:196-203, 2010.
3. S. Vazquez, J. I. Leon, L. G.Franquelo, J. J. Padilla, and J. M. Carrasco, "DC voltage- ratio control strategy for multilevel cascaded converters fed with a single DC source," *IEEE Trans. Ind. Electron.*, vol. 56, no. 7, pp. 2513–2521, Jul. 2009.
4. Srinath.K, Dr.P.Linga Reddy, "Matlab/simulink modeling of novel hybrid H-bridge multilevel inverter for PV application" *International Journal of Modern Engineering Research.*, vol.2,issue.2,pp.149-153 March 2012.
5. Georgios I.Orfanoudakis, Suleiman M.Sharkh and Michael A.Yuratich, "Analysis of DC- link capacitor losses in three-level neutral point clamped and cascaded H-bridge voltage source inverters."
6. V.FernaoPires, J.F.Martins, D.Foito, Chen Hao, "A Grid Connected Photovoltaic System with a Multilevel Inverter and a Le-Blanc Transformer." *International Journal of Renewable Energy Research.*, vol.2, No.1, 2012.
7. K.Lakshmi Ganesh, U.Chandra Rao, "Performance of Symmetrical and Asymmetrical Multilevel Inverters", *International Journal Modern Engineering Research.*, vol.2, issue.4, July-Aug.2012 pp.2293-2302, ISSN: 2249-6645.
8. D.PhaniDeepthi, Gandi.Vinaykumar. "A Novel Simplified Single-Phase and Three Phase Multistring Multilevel Inverter Topology for Distributed Energy Resources", *International Journal of Engineering Research and Applications*", vol.2, issue.3, May-Jun 2012, pp.661-665, ISSN: 2248-9622.
9. Divya Subramanian, Rebiya Rasheed, "Five Level Cascaded H-Bridge Multilevel Inverter Using Multicarrier Pulse Width Modulation Technique," *International Journal of Engineering and Innovative Technology.*, vol.3, Issue.1, July 2013.
10. Rajesh, M.Balasubramani, J.Gowrishankar, "Newly-Constructed Single Phase Multilevel Inverter for Distributed Energy Resources," *International Journal of Engineering and Technology*, vol.5, no.2, Apr-May 2013, ISSN: 0975-4024.



LINGUO CULTUROLOGY AS A DIRECTION OF LINGUISTICS

Mamadaliyeva Feruza Alimzhanovna

Teachers of the Department of the Uzbek language and literature of the Tashkent state economic University, Uzbekistan.

Kodirova Feruza Kakhramanovna

Teachers of the Department of the Uzbek language and literature of the Tashkent state economic University, Uzbekistan.

ANNOTATION

This article discusses issues related to the study of cultural linguistics as one of the areas of linguistics.

KEY WORDS: *linguistics, cultural studies, language, object and subject of research, literary texts, terminology.*

ЛИНГВОКУЛЬТУРОЛОГИЯ КАК НАПРАВЛЕНИЕ ЛИНГВИСТИКИ

*Мамадалиева Феруза Алимжановна,
Кодирова Феруза Кахрамановна
Преподаватели кафедры Узбекского языка
и литературы Ташкентского
государственного экономического
университета. Узбекистан.*

Аннотация

В данной статье рассматриваются вопросы, связанные с изучением лингвокультурологию как одно из направления лингвистики.

Ключевые слова: лингвистика, культурология, язык, объект и предмет исследования, художественные тексты, терминология.

Cultural linguistics is a science that arose at the intersection of linguistics and cultural studies and explores the manifestations of the culture of the people, which are reflected and entrenched in the

language. At the same time, one should not focus on the "joint" nature of the new science, because this is not a simple "addition" of the capabilities of two contacting sciences, but the development of a new



scientific direction that can overcome the limitations of the "narrow-departmental" study of facts and thereby provide a new vision and explanation. As a special field of science, cultural linguistics emerged in the 90s of the XX century. Attempts to give a periodization of its formation on the basis of clear and consistent criteria are unlikely to be crowned with success: firstly, too little time has passed, and secondly, assessments of the results of the existence of science for a certain period, according to the just remark of R.M. Frumkina, cannot be objective, since they reflect the subjective opinion of a researcher engaged in a particular scientific field.

Linguistics of the XXI century. is actively developing a direction in which language is viewed as the cultural code of the nation, and not just an instrument of communication and cognition. The fundamental foundations of this approach were laid by the works of V. Humboldt, A. A. Potebnya and other scientists. For example, W. Humboldt stated: "The boundaries of the language of my nation mean the boundaries of my worldview." Language not only reflects reality, but interprets it, creating a special reality in which a person lives. That is why the philosophy of the turn of the millennium develops on the basis of the use of language. LM Heidegger, an outstanding thinker of our time, called language "the house of being." Therefore, linguistics, the science of language, occupies an avant-garde methodological position in the system of any humanitarian knowledge and it is impossible to do without its help in the study of culture. Language is viewed as a path through which we penetrate not only into the modern mentality of the nation, but also into the views of ancient people on the world, society and ourselves. Echoes of bygone years, having survived the centuries, are preserved today in proverbs, sayings, phraseological units, metaphors, symbols of culture, etc. Linguoculturology is a humanitarian discipline that studies material and spiritual culture embodied in a living national language and manifested in linguistic processes (Oparina). It allows you to establish and explain how one of the fundamental functions of language is carried out - to be an instrument for the creation, development, storage and transmission of culture. Its goal is to study the ways in which language embodies in its units, stores and translates culture.

Cultural linguistics is a humanitarian discipline that studies material and spiritual culture (Oparina) embodied in a living national language and manifested in linguistic processes. It allows you to establish and explain how one of the fundamental functions of language is carried out - to be an instrument for the creation, development, storage and transmission of culture. Its goal is to study the ways

in which language embodies in its units, stores and translates culture

We distinguish between the object and the subject of research. By the object of research, we understand a certain area of reality, which is a set of interrelated processes and phenomena.

The subject of research is a certain part of the object that has specific characteristics, processes and parameters. For example, a common object for all humanities is a person, the subject of study for each of these sciences is its own - a certain side of a person and his activities. The object of cultural linguistics is the study of the interaction of language, which is a translator of cultural information, culture with its attitudes and preferences, and the person who creates this culture using language. The object is located at the "junction" of several fundamental sciences - linguistics and cultural studies, ethnography and psycholinguistics.

The subject of this science's research is language units that have acquired symbolic, standard, figurative and metaphorical meaning in culture and which generalize the results of human consciousness proper - archetypal and prototypical, recorded in myths, legends, rituals, rituals, folklore and religious discourses, poetic and prosaic literary texts, phraseological units and metaphors, symbols and paremias (proverbs and sayings), etc. All of the above researchers emphasize the importance of teaching a foreign language as a component of culture and recognize the fact that a new stage in the development of this issue has come, which meets both increased needs the educational process, as well as a deeper understanding of the issues of the relationship between language and culture and its reflection in the practice of language teaching.

Each person belongs to a certain national culture, including national traditions, language, history, literature. Economic, cultural and scientific contacts of countries and their peoples make relevant topics related to the study of intercultural communications, the relationship of languages and cultures, and the study of the linguistic personality. E. Sapir wrote: "Language is a guidebook that is gaining more and more importance as a guiding principle in the scientific study of culture."

Cultural linguistics is one of the leading areas of linguistic research. It comes from the spirit of the language or from certain phenomena associated with the linguistic mentality, studies the national-cultural specific rules for organizing speech communication, shows the spirituality, collegiality of the Russian people, reflected in the language. In contrast to regional studies and ethnolinguistics, cultural linguistics is "a holistic theoretical and descriptive study of objects as a functioning system of cultural values reflected in the language, a contrastive



analysis of linguocultural spheres of different languages (peoples) on the basis of the theory of linguistic relativity (hypothesis of E. Sapir-B. Whorf)

"

Language enters the world through meaning, meaning is a path that connects language with extra-linguistic reality. A certain socioculture lies behind linguistic phenomena. Behind the linguistic picture of the world lies the socio-cultural picture of the world. To really use the spoken language, you need to know the totality of extra-linguistic facts, what lies behind the language. The growing interest in the problem of "language-culture" makes the need to clarify the sources, parameters, research methods of concepts included in the sphere of the terminological inventory of the concept of "language and culture" more and more urgent, the interests of all human sciences converge, this is the cross-cutting idea that destroys the boundaries between disciplines who study a person, since one cannot study a person outside his language. Language is the main form of expression and existence of national culture. E. Sapir wrote: "Culture can be defined as what a given society does and thinks about. Language is the way people think." Language, thus, acts as a realized internal form of culture expression, as a means of accumulating cultural knowledge.

The main purpose of culture is to be a means of spiritual enrichment of the individual. A person immerses himself in the "world of culture", mastering many languages specific to material and spiritual culture. The national character of culture presupposes the interaction of languages and cultures of different peoples, their mutual enrichment to an integral "fundamental basis" - world culture, achievements. All of humanity. Culture as a creation of the people is the unity of the national (specific) and general (international).

LITERATURE

1. Vereshchagin, EM, Kostomarov, VG *Linguistic and cultural theory of the word.* - M.: Russian language, 1980, - 320 p.
2. Elizarova, TV. *Formation of intercultural competence of students in the process of teaching foreign language communication: Author's abstract. dis Doctor of Pedagogical Sciences.* SPb, 2001.-37 p.
3. Ismoilov T.S., Mustaeva GS. *Suz birikmasi tarkibligi ingliz juridical atamalaritarjima sihusushida / Badiy tarjimaning lingvo muammolari: Republic of ilmiy-amaliy anjumani materialari, 2012 yil 23-24 November, Samarkand, 2012 -75-77 betlar.*
4. Latyshev LK *Technology of translation.* - M.: NVI-Thesaurus, 2000.
5. Novikov A. M. *Post-industrial education.* M.: Publishing house "Egves", 2008.-p. 42.



THE USE OF ICT FOR THE DEVELOPMENT OF PROFESSIONAL FOREIGN LANGUAGE ORAL SPEECH SKILLS

Akhmedova Mukaddas Hodimatovna¹

¹PhD., Associate Professor, Tashkent University of Information Technologies

Hosilova Farida Rustamdjanovna²

²Teacher National University of Uzbekistan

ABSTRACT

The article deals with the use of modern information and communication technologies in the teaching of linguistic disciplines in the university. Information competence, which has become one of the main indicators of quality education, is one of the main conditions of modern education, and its formation directly depends on the active activity of students in an open information and educational environment. Modern ICT allows creating unique didactic conditions for the development and ordering of individual educational trajectories in the teaching of linguistic disciplines in the university.

KEYWORDS: *information and communication technology, multimedia, professional speech, oral communication, language training, educational process.*

ИСПОЛЬЗОВАНИЕ ИКТ ДЛЯ РАЗВИТИЯ УМЕНИЙ ПРОФЕССИОНАЛЬНОЙ ИНОЯЗЫЧНОЙ УСТНОЙ РЕЧИ

*Ахмедова Мукаддас Ходиматовна¹,
Хосилова Фарида Рустамджановна,²*

*¹Кандидат педагогических наук, доцент
Ташкентского университета информационных технологий;
²Преподаватель Национального университета Узбекистана.*

Аннотация

В статье рассматривается потенциал современных ИКТ для развития умений профессиональной иноязычной устной речи. Информационная компетентность, ставшая одним из основных показателей качественного обучения, является главным условием современного образования, и ее формирование напрямую зависит от активной деятельности обучающихся в открытой информационно-образовательной среде. Современные ИКТ позволяют создавать уникальные дидактические условия для разработки и упорядочения индивидуальных образовательных траекторий в обучении языковым дисциплинам в вузе.

Ключевые слова: *информационная коммуникационная технология, мультимедиа, профессиональная речь, устное общение, языковое обучение, учебный процесс.*



Развитие информационного общества неразрывно связано с возрастанием потребности каждого человека в постоянном повышении квалификации, обновлении знаний, освоении новых видов деятельности. Эта тенденция обусловила постановку вопроса об изменении самой парадигмы и модели образования. Возникла необходимость обеспечить адекватность образования динамичным изменениям, происходящим в природе и обществе, всей окружающей человека среде, возросшему объему информации, стремительному развитию информационных технологий. Вхождение человечества в эпоху информационного общества обусловило смену устоявшегося девиза «образование на всю жизнь» новым девизом — «образование в течение всей жизни». Качественно новыми чертами, характеризующими инновационную парадигму образования, являются ориентация на развивающуюся личность, переход от репродуктивной модели образования к продуктивной, гуманистической, культурно-ориентированной; многоукладность и вариативность, деятельностный характер образования. Важнейшей составляющей новой парадигмы образования стала идея непрерывного образования, охватывающего все формы, типы и все уровни образования.

Современное образование, общее и профессиональное, не может быть реализовано в полной мере без использования информационно-коммуникационных технологий (ИКТ).

Интернет, мобильные и спутниковые средства связи, так же как и традиционные средства массовой коммуникации, помогают совершенствовать общие и профессиональные компетенции, способствуют развитию всех видов речевой деятельности на иностранном языке. Новые виды коммуникационного взаимодействия приводят к новым формам устного общения. Международная интеграция и коммуникативная адаптация к современному мультинациональному и межкультурному пространству оказывают большое влияние на формирование умений устной речи на иностранном языке.

Использование современных информационных технологий в процессе обучения позволяет интенсифицировать и повышать качество преподавания русского языка (как иноязычного) и дисциплин естественнонаучного цикла, увеличивать количество и объём предъявляемых студентам обучающих и контролирующих программ за счёт сокращения времени на их освоение и выполнение, развивать интерес к учебной деятельности и разнообразить её. Следует

отметить, что использование в учебном процессе информационнокоммуникационных технологий (ИКТ) является эффективным способом повышения мотивации студентов к изучению учебных дисциплин. Использование компьютера, как средства отображения наглядности и поддержки процесса обучения, обладает целым рядом уникальных возможностей, облегчая студентам восприятие и понимание лексико-грамматического материала. При этом компьютер позволяет чётко и однозначно предъявлять элементы языковой наглядности, акцентировать внимание студентов на отдельных важных аспектах темы с помощью выделения их цветом, использования вспомогательных рисунков, схем, в том числе и анимированных. Компьютер позволяет расширить возможности предъявления и закрепления учебного материала, вовлечь студентов в ход учебного процесса, усиливая мотивацию процесса получения новых знаний. Компьютер качественно изменяет подход к контролю за аудиторной и самостоятельной работой студентов, обеспечивая при этом гибкость управления процессом обучения и делая его объективным и доступным.[1]

В настоящее время основным источником информации почти во всех областях знаний является Интернет. Современные устройства, такие как смартфоны, планшетные компьютеры, нетбуки, ноутбуки, использующие технологию Wi-Fi, предоставляют большие возможности применения их почти на всех занятиях в любой аудитории.

Большое значение для развития умений устной речи имеет моделирование в учебном процессе профессионально ориентированной среды, имитирующей реальные ситуации общения. Такое моделирование предполагает, что способы решения задач проблемного характера определяются самими студентами на основе их интересов, индивидуальных особенностей, потребностей, мотивов, способностей, т.е. устанавливается непосредственная связь учебного материала с жизненным опытом обучающихся [4].

Наглядность представляемого материала повышает степень его усвоения, так как оказываются задействованными зрительный и слуховой каналы восприятия студентами внешней информации. Данная задача успешно решается с использованием многократно апробированных и получивших широкое распространение мультимедиа-технологий.

Мультимедиа-это совместное представление текстовой, графической, числовой и звуковой и видеоинформации. Графическое представление учебного материала позволяет



акцентировать внимание студентов на ключевых моментах изучаемой темы, даёт возможность преподавателю повысить их мотивацию и усилить интерес к изучению и запоминанию нового материала, т.е. реализовать основополагающий дидактический принцип обучения - принцип наглядности.[2]

Так, например, при изучении темы «Выражение объектных отношений в простом и сложном предложениях.(Лексическая тема:Личность и профессия)» используется мультимедийная презентация. В процессе разработки мультимедийных презентаций был решён ряд проблем, связанных, в частности, с вводом новой для студентов лексики и лексико-грамматических конструкций. При изучении текста «Выбор профессии» классификация профессий и их названия отображаются на экране монитора на русском языке с одновременным проговариванием диктором.[7]

Текст: Выбор профессии

Современный список профессий содержит около 40 000 наименований. Если бы каждый день, исключая выходные и каникулы, человек слушал бы рассказ только об одной профессии, чтобы узнать обо всех, ему понадобилось бы около 185 лет. Психологи предложили простую и удобную классификацию всех 40000 профессий. Главным признаком профессии выделяют предмет труда, то есть то, чем работает человек. По этому признаку профессии делятся на пять групп.

1. «Человек и природа». К этой группе относятся все профессии, связанные с природой. Это биологи, агрономы, цветоводы, экологи, геологи, гидрологи.

2. «Человек - техника». К этой группе относятся профессии, предметом труда которых является техника. Это токарь, шофёр, машинист, механик, строитель.

3. «Человек - человек». К ней относятся профессии, связанные с общением людей – врач, учитель, воспитатель, тренер.

4. «Человек – знаковая система». Это профессии, в которых человек имеет дело со знаками. Для математика такими знаками являются математические символы, для переводчика – родной и иностранный языки, для бухгалтера – отчёты, документация.

5. «Человек – художественный образ». Эта группа объединяет людей, создающих эстетические ценности. Это музыкант, резчик по ганчу, писатель, дизайнер, художник.

С помощью этого разделения психологи определяют, какую профессию может выбрать человек.

Главная гарантия правильного выбора

профессии – в горячем желании и серьёзном отношении к выбранной профессии.

В мультимедийной презентации реализована возможность многократного повторения текста и отдельных словосочетаний, что даёт возможность студентам лучше понимать излагаемый материал и при необходимости проговаривать отдельные слова и словосочетания.

Данный мультимедийный контент содержит несколько блоков дополнительного материала, способствующего более полному усвоению студентами учебного материала. Здесь также представлены блок лексико-грамматического материала, блок русскоязычных слов и словосочетаний в формате «слушайте и повторяйте», вопросы для самопроверки и ссылки на рекомендуемую литературу с указанием соответствующих разделов и Интернет-источники. Для обеспечения студентам удобства работы мультимедийная презентация снабжена разветвлённой системой гипертекстовых ссылок. Созданный электронный продукт содержит и другие программные модули. [7]

Использование современных технологий обучения в сочетании с мультимедийными материалами, адаптированными к специфике обучения студентов, а также образовательными ресурсами, имеющимися в свободном доступе, позволяет повысить мотивацию, уровень и качество подготовки студентов при изучении практического курса русского языка. Особую роль в формировании мотивации играют новизна и форма представления получаемой студентом информации, а также их включение в поисковую, творческую деятельность.

Современные технологии помогают успешно моделировать ситуации профессионального общения и тем самым способствуют интенсивному развитию умений профессиональной иноязычной устной речи.

В ходе решения и обсуждения проблемных вопросов в профессиональном мышлении обучаемых осуществляется перенос фактических знаний, полученных на занятиях по профессиональным дисциплинам, в область решения практических задач, а также перенос этих знаний из одной ситуации в другую и затем преобразование данных ситуаций в соответствующую обобщённую схему. Одновременно развивается умение профессионально мыслить, то есть правильно, целенаправленно оперировать понятиями в условиях возникшей профессионально значимой практической задачи.



Иноязычные умения устной речи можно развивать, общаясь непосредственно с представителями русскоговорящего сообщества. Форумы сайта —UK youthonline и социальной сети —Facebook дают возможность обмениваться мнениями по проблемам, которые волнуют сверстников за рубежом. А использование при этом Web-камеры или программы «Скайп» (видеозвонок) делает такое общение реальным.

Также развитие умений профессиональной иноязычной устной речи можно осуществлять с помощью обучающих компьютерных игр.

Интеграция современных информационно-коммуникационных технологий в традиционное образовательное пространство способствует развитию умений профессиональной иноязычной устной речи студентов нелингвистических специальностей. Отражая реальные ситуации, связанные с профессиональной деятельностью студентов, различные ИКТ создают условия для естественного использования обучаемыми иностранного языка подобно родному языку. Поскольку весь процесс разрешения проблемной ситуации происходит на основе иностранного языка, здесь мы можем говорить о параллельном развитии профессиональных умений будущего специалиста и иноязычных умений устной речи как на базовом, так и на профессиональном уровне. Имитация с помощью ИКТ реального профессионального общения на иностранном языке повышает интерес студентов к профессиональному обучению.

Список литературы

1. Слостенин В.А. и др. Педагогика: учеб. пособ. для студ. высш. пед. учеб. завед. / - М.: Академия, 2005.
2. Владимирова Л.П. Современные информационнокоммуникативные и педагогические технологии в образовании / - Режим доступа: www.relearn.ru/conf.
3. Полат Е.С. Новые педагогические и информационные технологии в системе образования. - М., 2000.
4. Сокол И.А. Проект как метод реализации коммуникативного подхода в обучении иностранному языку // Иностранные языки в школе. - 2008. - № 1. - С. 16-21.
5. Belenkova N.M. Computer Games: Leisure or Stimulus to Learning. Conference Proceedings. International Conference ICT for Language Learning. 6th Conference Edition Florence, Italy 14-15 November 2013. - Libreriauniversitaria.it edizioni - P. 304-307.
6. Belenkova N.E. Learning and Teaching English as a Foreign Language at University // Journal of International Scientific Publications: Educational

Alternatives, 2012. - Vol. 10. - Part 2. - PP. 42-49.

7. Ахмедова М.Х. Об эффективности применения информационно-коммуникационных технологий в обучении языкам //Филологические науки. Вопросы теории и практики. - Тамбов (Россия), 2017. №2(3) ст.202-206
8. Буримская Д. В., Харламенко И. В. Комплексный подход при обучении студентов неязыковых факультетов иностранному языку на базе информационных систем // Вестник Московского государственного областного университета. Серия: Педагогика. 2019. № 2. С. 96-111.
9. Казакова Т.А. Использование информационно-коммуникационных технологий в процессе преподавания иностранного языка в вузе // Лингвистика и межкультурная коммуникация. 2015. Выпуск №3 (17). - С. 78.
10. Тарамова, Э.А. Проблемы и перспективы использования ИКТ в высшей школе // Актуальные задачи педагогики: материалы VI Междунар. науч. конф. (г. Чита, январь 2015 г.). - Чита: Издательство Молодой ученый, 2015. С. 156.



METHODS OF TEACHING FOREIGN LANGUAGES IN THE INSTITUTE OF ARTS AND DESIGN

Inoyatova Dilorom, Umarova Dिल्фуза

Senior lecturers of the department Uzbek and foreign languages National Institute of Arts and Design named after Kamoliddin Bekzod. Tashkent. Uzbekistan.

ANNOTATION

The article substantiates the search for the implementation in the pedagogical process of the main directions and ways of solving the problems facing the universities of arts and culture in the period of their modernization and improving the quality of training of future specialists in the field of culture.

KEY WORDS: *pedagogical process, content of education, subject-subject relations of teachers and students, interactive forms and methods, techniques and means of education and training.*

МЕТОДИКА ПРЕПОДАВАНИЯ ИНОСТРАННЫХ ЯЗЫКОВ В ИНСТИТУТЕ ХУДОЖЕСТВ И ДИЗАЙНА

Иноятова Дилором, Умарова Дिल्фуза

Старшие преподаватели кафедры

Узбекского и иностранных языков

Национального института художеств и дизайна

имени Камолитдина Бекзода.

Ташкент. Узбекистан.

Аннотация

В статье обосновываются поиски реализации в педагогическом процессе основных направлений и путей решения проблем, стоящих перед вузами искусств и культуры в период их модернизации и повышения качества подготовки будущих специалистов сферы культуры.

Ключевые слова: *педагогический процесс, содержание образования, субъект-субъектные отношения преподавателей и студентов, интерактивные формы и методы, приемы и средства воспитания и обучения.*

The strategic goal of Uzbek higher education at the present stage is to improve the training of the quality of specialists, therefore, the problems of improving the educational process in universities are

becoming more and more urgent. This is due to a number of circumstances: firstly, the fact that despite the emergence of innovative pedagogical science of the post-industrial stage of development of society,



unfortunately, both general secondary and vocational education are still carried out on the basis of a traditional, but already outdated system, "oriented on the transfer of knowledge, private skills and abilities, and realizing the associative-reproductive principle of learning"[1]. The same fully applies to the higher professional school.

Secondly, the change of centuries that mankind is going through is always accompanied by a crisis in all spheres of social life, including the crisis in education: "The essence of the global crisis in education in its most general form was defined as an increasing gap between the results of the functioning of education systems and continuously changing, rapidly growing, production, social and cultural requirements of society"[2].

Third, the rapid acceleration of the scientific and technical process contributes to the emergence of a watershed between the knowledge obtained by students in all types of educational organizations and the requirements of the time. The rapid acceleration of scientific and technological progress leads to the fact that the knowledge obtained in educational institutions is increasingly becoming obsolete before graduates have time to receive diplomas and certificates. There is a doubt about the rationality of the entire traditional system of vocational education, associated with a long, often many years of educational "preparatory" stage, preceding the direct inclusion of students in real professional activities. After all, it often turns out that while students get to know the profession through lectures, textbooks, etc., the content of the profession changes so much that when a graduate comes to work, he is told: forget everything that was taught to you at the university and start learning again. And this is stated by many pedagogues-scientists: "The traditional attitude towards transferring the "necessary stock of knowledge" from the teacher to the trainees is becoming completely utopian, since in modern conditions the obsolescence of information occurs much faster than the completion of a single cycle of education in higher education. It is necessary not only to have knowledge, how much to master personal characteristics, to be able at any moment to find and select the necessary knowledge in the huge repositories of information created by mankind"[4].

Fourth, the modernization of all links of the Russian education system on paper has been carried out for more than two decades. However, two decades of modernization, but in reality a deep reform of Russian education did not lead to the expected shifts, making it obvious the problem of inconsistency of results at all levels of education with the requirements of students, parents, employers, the state and the information society as a whole.

The main reason is that, one way or another, implemented decisions on the main directions of modernization leave intact the system-forming foundations of the traditional educational paradigm of the outgoing industrial society: its principles, the way of life of educational institutions, pedagogical technology, the regulatory framework in the form of curricula and programs, and most importantly inheritance of social experience "[5].

Therefore, innovative ideas are still not implemented in the pedagogical university process, since everything new is assimilated in the old, traditional, without leading to the expected increase in the quality of training specialists. The transition has not yet taken place in the educational process when the goal is to educate the individual, but knowledge, skills, methods of activity are the means by which this goal is realized.

So, in order to solve the problems facing higher professional education (bachelor's and master's degrees), a decisive transition from the traditional, knowledge-oriented educational paradigm to the activity of the educational paradigm is necessary: "The transition from the educational paradigm of an industrial society to the educational paradigm of a post-industrial society means, first of all, from understanding education as obtaining ready-made knowledge and the idea of a teacher as a carrier of ready-made knowledge. This is being replaced by the understanding of education as the property of the individual, as a means of self-realization in life, as a means of building a personal career. And this changes both the goals of teaching and upbringing and its motives, norms, forms and methods, and the role of the teacher, etc. "

The educational paradigm is understood as "the totality of worldview and theoretical premises accepted in the pedagogical community that determine specific approaches to the design of the educational process and the educational practice itself" [6].

The structure of the new activity educational paradigm includes, according to A.M. Novikov, values, motives, norms, goals, position of participants in the educational process, forms, methods, means, control and assessment of the quality of training, education and development of students. In modern conditions, the content of education is considered in an integrative unity with upbringing: "The content of education and upbringing is a system of knowledge, abilities, skills, attitudes and experience of creative activity, the mastery of which ensures the development of abilities, the formation of a worldview and morality, behavior, preparation for social life and work" [7].

A very well-grounded concept of the content of education was put forward in the "Pedagogy of



vocational education" edited by V.A. Slastenin. Before defining the content of education, this textbook discloses the general requirements for the content of education, which we are guided by in its selection, design and implementation in the teaching and educational process in a foreign language:

1. The content of education is one of the factors of economic and social progress. It should be focused on ensuring self-determination of the individual, creating conditions for his self-realization; development of society; to improve and strengthen the state.

2. The content of education is designed to provide an appropriate world level of general and professional culture of society; the formation of a student's picture of the world, adequate to the modern level of knowledge and the level of the educational program (stage of study); the formation of a person and a citizen, integrated into his contemporary society and aimed at improving this society; reproduction and development of human resources in society.

3. Vocational education of any level aimed at young people obtaining a profession and relevant qualifications.

4. The content of education should correspond to mutual understanding and cooperation between people, between peoples, regardless of their racial, national, ethnic, religious and social affiliation, take into account the diversity of worldview approaches, promote the realization of students' right to free choice of opinions and beliefs.

The content of education in a higher educational institution is not limited to vocational training, although it is the specialty that determines the main list of the discipline of the university. The content should be ahead of such urgent problems for modern society as improving the rule of law, the integration of man and society into world culture, interethnic and interfaith cooperation. That is, repeating the formula traditional for pedagogues at the level of a general theoretical understanding, the content fully reflects the traditional set of Russian problems and in this sense is largely determined by them, representing the formalization of the social order. At the same time, he emphasizes that the content of education is also a tool for personal development.

Especially high requirements for the content of education are imposed on universities of arts and culture. Sociocultural education is associated with the training of specialists as the main subjects of not only socio-cultural, but also spiritual and moral transformations in the Russian society, carrying out the historical mission of shaping the personality as the highest value of society. [8] Uzbek higher socio-cultural education (bachelor's and master's degrees) is

perceived in the context of modernization and implementation as a special socio-cultural phenomenon, which, according to E.N. Vasilyeva, two roles fall out: the first is the traditional one associated with the training of specialists, and the second is human studies, which is no less important than the first, especially in connection with the increasing inconsistency of national consciousness, the growth of destroyed tendencies that deny the originality and meaning of domestic universities of arts and culture, and with a sharp stratification of society.

В инновационном обучении иностранному языку в вузах искусств и культуры совместная деятельность преподавателей и студентов является способом реализации взаимодействия на основе содружества, сотрудничества, сопричастности. Субъект-субъектные отношения всех участников учебно-воспитательного процесса в условиях реализации федерального государственного стандарта высшего образования, во-первых создают возможность перейти от монологического типа общения (педагог-студент) к диалогическому, от авторитарной формы отношений к авторитетной; во-вторых, при организации педагогического взаимодействия как совместной деятельности осуществляется смена социальной пассивности студента на социальную активность, что способствует углублению процесса. Его индивидуализации и социализации; в-третьих, в процесс совместной деятельности преподавателей и обучающихся студентов активизируется механизм идентификации, способствуя возникновению эмпатийности, толерантности, воспитанию чувства сопереживания участниками педагогического процесса, понимания потребностей других, как своих собственных; в-четвертых, при совместной деятельности субъектов педагогического процесса гораздо эффективнее, как мы уже убедились, осуществляется у обучающихся процессы воспитания и самовоспитания, обучения и самообучения, развития и саморазвития.

An innovative pedagogical process of teaching a foreign language, based on the activities of the educational paradigm, including a theoretical and methodological basic approach, contributing to the achievement of the goal of educating an individual, citizen, patriot and professional. The new, corresponding to the post-industrial information stage of the development of society and the pedagogy of



the educational content, subject-subject relations of the participants in the pedagogical process naturally and naturally demanded innovative, interactive forms, methods, techniques and means of education and training of students studying foreign languages in universities of arts and culture. And this means, first of all, the replacement of the one-sided activity of the teacher with the method of dialogue communication based on heuristic didactics, with independence, initiative, cognitive and activity activity and the responsibility of students for the results of their upbringing and education. In the theory of modern professional pedagogy, in the methods of university teaching of academic disciplines, the problem of transforming the explanatory-illustrative type of education and training into innovative practice of widespread use, along with traditional, interactive forms and methods of work, is especially relevant. So, we turn to the direct presentation of the experience of their use in the practice of teaching foreign languages at the National Institute of Arts and Design named after Kamoliddin Bekzod.

Interactive education and training carried out in the course of the pedagogical process is characterized by the use of forms, methods, techniques and means that carry out continuous interaction and mutual understanding of teachers and students, based on the desire, on the one hand, of the teacher to arouse the interest of students in intellectual and spiritual and moral improvement for mastering culture in the process of teaching a foreign language, expanding the in-depth educational space; on the other hand, on the part of students - on the basis of their interest in the content, forms and methods of teaching this academic discipline and their perceived need to improve the quality of preparation for future sociocultural activity - the manifestation of maximum efforts in the perception of the academic subject, the desire and desire to acquire, as new personal qualities, and new knowledge in the mastery of which they are actively involved.

We specially cited examples of interactive forms, methods, methods of education and training in the pedagogical process not from textbooks, but from factors and events of modern world social life. "To form a stable system of moral and semantic attitudes of the individual, allowing to resist the ideology of extremism, nationalism, xenophobia, corruption, discrimination on social, religious, racial, ethnic grounds and other negative social phenomena." Nowadays, every teacher in his practical university activities should proceed from the fact that, in order to ensure the development of students' abilities necessary for them to live in a dynamic, rapidly and contradictory developing and changing world.

Thus, we can draw the following conclusion that the innovative activity of teachers of a foreign language, based on the consistent introduction of all the above theoretical and methodological provisions into the practice of pedagogical work, with a creative, professionally aimed application of them in teaching and educational work in the discipline "Foreign language" shows high the results in monitoring and taking into account the knowledge and skills of students, mastering the methods of practical activity, make a significant contribution to the general professional competence of future specialists in the field of arts and culture.

BIBLIOGRAPHY

1. Kasimova G.M. *Competence paradigm of education: the experience of philosophical and methodological analysis // Til va adabiyot talimi, 1987, no. - b. 19-27.*
2. Belkin A.S. *Dissertation Council on Pedagogy (Experience, Problems, Prospects) / A.S. Belkin, E.V. Tkachenko; Ural. state ped. un-t. - Yekaterinburg, 2005. -- 208 p.*
3. Berulava G.A., Berulava M.N. *New methodology of personality development in the educational information space // Pedagogy, 2012. №4. - S. 40-43.*
4. Bogachev ID *Formation of the future teacher of the foundations of professional activity. - L., 1990.*
5. Vasilyeva E.N. *National paradigm of Russian socio-cultural education: author. dissertation. for a job. uch. Art. doc. Social Science. - Tyumen, 2007. -- 358 p.*
6. Verbitsky A. A., Rybakina N. A. *Methodological foundations for the implementation of the educational paradigm // Pedagogy, 2014, no. - S. 3-15.*
7. A.V. Novikova. *General education: the brilliance of declarations and prospects for implementation // Pedagogy, 2015, no. - S. 51-58.*
8. Vasileva Yu.D. *Postindustrial education: Publicistic polemic monograph. - M. : Egves, 2008. -- 136 p.*



METHODS OF ORAL SPEECH DEVELOPMENT IN THE CLASSROOM OF RUSSIAN AS A FOREIGN LANGUAGE

Yadgarova Guzal Isanbayevna¹

¹Senior lecturer, National University of Uzbekistan

Begmatova Navruza Abdukhamidovna²

²Senior lecturer, National University of Uzbekistan

Shakarova Feruza Dolievna³

³Teacher, National University of Uzbekistan

ABSTRACT

Russian language development as one of the main directions of teaching Russian to students is discussed in the article. The importance of the types of speech skills, the development of which is considered the main task of teaching students a second language, is noted. The article also raises the question of the use of speech situations in the oral course of the Russian language. Attention is paid to the formation and development of students' dialogic speech through thematic selection of vocabulary, which ensures the proper communicative goals of teaching.

KEYWORDS: *speech activity, dialogic speech, speech communication, situation, exercises, listening, speaking, skills, skills.*

МЕТОДИКА РАЗВИТИЯ УСТНОЙ РЕЧИ НА ЗАНЯТИЯХ РУССКОГО ЯЗЫКА КАК ИНОСТРАННОГО

**Ядгарова Гузал Исанбаевна,¹ Бегматова Навруза Абдухамидовна,¹
Шакарова Феруза Долиевна,²**

*¹Старшие преподаватели, ²преподаватель
Национального университета Узбекистана*

Аннотация:

в статье говорится о развитии русской речи как одном из основных направлений обучения русскому языку учащихся. Отмечается важность видов речевых умений и навыков, выработка которых у учащихся считается основной задачей обучения второму языку. А также в статье поднимается вопрос применения речевых ситуаций в устном курсе русского языка. Уделяется внимание формированию и развитию диалогической речи студентов путём тематического отбора лексики, обеспечивающего в должной мере коммуникативные цели обучения.

Ключевые слова: *речевая деятельность, диалогическая речь, речевая коммуникация, ситуация, упражнения, аудирование, говорение, умения, навыки.*



Содержание обучения русского как иностранного реализует его основные цели, направленные на формирование у учащихся языковой, речевой и коммуникативной компетенций. Данные компетенции предполагают как приобретение чисто лингвистических знаний (лексических, фонетических, грамматических), так и их нормативное использование в устной и письменной речи, что, в свою очередь, требует от преподавателя необходимости формирования различных видов речевой деятельности (говорения, чтения, аудирования, письма), развития социокультурных навыков и умений, обеспечивающих использование иностранного (русского языка как иностранного) языка как средства общения, образования и самообразования, инструмента сотрудничества и взаимодействия в современном мире. В этом плане встает вопрос о необходимости изучения методики преподавания русского как иностранного на уровне устной и письменной речи и проблемы переноса теоретических знаний на практику, т.е. изучения на современном этапе.

Речевая деятельность – это один из видов деятельности человека, понимаемый методистами как «активный, целенаправленный опосредованный языковой системой и обусловливаемый ситуацией общения процесс передачи или приёма сообщения». Другими словами, речевая деятельность состоит в порождении или восприятии речи средствами языка с целью обмена информацией. Это система умений творческого характера, которая направлена на решение различных коммуникативных задач.

Предметом речевой деятельности является мысль как форма отражения окружающей действительности во всех её проявлениях. Основным средством существования, оформления и выражения мысли выступает язык.

Речевая деятельность на родном и иностранном языках осуществляется одними и теми же речевыми механизмами, однако уровень их функционирования на иностранном языке вначале ниже, чем на родном. Чтобы эти механизмы приспособились на должном уровне обеспечивать реализацию различных видов речевой деятельности средствами неродного языка, нужны определённые усилия и специальные упражнения.

Форма речи делится на 2 вида: устная и письменная. Также виды речевой деятельности различаются по признаку продуктивный/рецептивный. Устная и письменная речь – это два равнозначных способа выражения

средствами языка одного и того же содержания. Они тесно связаны, взаимообусловлены и взаимодействуют. Однако соотношение устной и письменной речи на разных этапах обучения русскому языку является различным. Сначала учащиеся овладевают только устной речью. Устная речь подготавливает учащихся к овладению навыками письменной речи.[2]

Устная речь - это любая звучащая речь. В устной речи большую роль играют место логического ударения, степень четкости произношения, наличие или отсутствие пауз. Устная речь обладает таким интонационным разнообразием речи, что может передать все богатство человеческих переживаний, настроений и т.п.

Устную форму речи характеризует:

- контактность с собеседником;
- ситуативность;
- большая доля паралингвистической информации (мимика, жесты, позы);
- линейность во времени;
- необратимость отзвучавшего отрезка речи;
- темп, задаваемый говорящим;
- высокая степень автоматизированности.

Лингвистические особенности устной формы речи:

- богатство интонационного оформления;
- обилие лексических единиц;
- сравнительно несложное грамматическое оформление;
- распространённые в диалогах эллиптические конструкции;
- возможен инверсированный порядок слов;
- частотно изменение на ходу внешнего оформления программы высказывания;
- характерно наличие семантически не значимых слов – заполнителей пауз.

Устную речь составляют аудирование (слушание и понимание речи на слух) и говорение (порождение высказывания, речи). Эти две стороны устной речи тесно взаимосвязаны, так как и в процессе аудирования, и при говорении участвуют органы слуха и артикуляционный аппарат.[2]

Аудирование и говорение – это такой вид речевой деятельности, который нацелен на восприятие, прием информации и последующую ее переработку, поэтому их относят к рецептивным видам речевой деятельности. Процесс восприятия состоит из анализа и синтеза разноуровневых языковых единиц (фонем, морфем, слов, предложений), в результате чего происходит преобразование воспринятых звуковых сигналов в смысловую запись (т.е. наступает смысловое понимание).



Устная речь существует в форме диалогической или монологической речи. Одним из важнейших видов речевых умений и навыков, выработка которых у учащихся и студентов считается основной задачей обучения второму языку в школе и вузе, являются, безусловно, навыки диалогической речи. Диалог обслуживает потребности людей в речевом общении во всех областях их деятельности. Диалогическая речь, как наиболее употребительная форма речевой коммуникации, отличается от других форм прежде всего естественностью. Академик А.В. Щербак писал: «Монолог является в значительной степени искусственной языковой формой, подлинное свое бытие язык обнаруживает лишь в диалоге» [1].

При обучении диалогической речи на неродном языке наблюдаются легкие и более трудные шаги. «Легкие – реплики-реакции, трудные – реплики- стимулы. В упражнениях, в основном, реплики-стимулы представляют собой вопросы или так называемые речевые вопросы, побуждающие к высказыванию, а реплики-реакции составляют соответственно ответы на вопросы или встречные вопросы (контрвопросы)» [5].

Основная задача предварительного учебного курса – научить в равной мере и коммуникативной, и назывной речи. Основное требование современной методик состоит в том, чтобы обучение происходило на коммуникативно-ценных речевых единицах, отражало естественные связи этих единиц в реальном непринужденном общении. Тематический отбор лексики для предварительного устного курса не обеспечивает в должной мере коммуникативных целей обучения. Речевой стимул – такое воздействие со стороны учителя, или средств обучения, или учебного процесса в целом, которое формирует и развивает элементарную речевую деятельность учащихся.

Речевой стимул – это внешний стимулятор речевой деятельности. Он задается учителем и выступает как причина, побуждающая к речи, выражается словесно и вытекает из смысла ситуации. В основе высказывания должен лежать еще и непосредственный речевой мотив, то есть желание ответить на вопросы, сообщить друг другу о своих впечатлениях. Речевое действие на основе речевой ситуации возможно лишь при наличии и единстве компонентов ситуации. Для продуцирования речи важна привлекательность ситуации. В создании учебной речевой ситуации большое место отводится наглядности. Иллюстративный материал дает возможность учителю постоянно создавать новые ситуации для речевых упражнений.

С целью формирования речевых умений и навыков необходимо проведение подготовительных (тренировочных) упражнений. Использовать речевые ситуации на занятиях изолированно нецелесообразно. Их следует включать систематически в учебный процесс. Чтобы нерусские учащиеся приобретали хотя бы элементарные навыки повседневного общения, что входит в требования учебной программы к практическому овладению русским языком, необходимы специальные занятия, направленные на развитие у учащихся разговорной диалогической речи, которые как по содержанию, так и по методике проведения во многом должны отличаться от диалогических упражнений из программного материала. Дифференциация должна быть отражена в первую очередь в требованиях учебной программы по русскому языку, в учебных пособиях, а также в словарно – фразеологическом минимуме. Все это дает преподавателю возможность равномерно распределять учебное время на уроке для работы по развитию как книжной, так и разговорной речи учащихся, усвоение которых можно считать двумя сторонами единого процесса – практического овладения русским языком. [4]

Порождению речевого высказывания соответствуют два фактора: мотив речевого действия и характер участников диалога. В пособиях для иностранцев, изучающих русский язык, можно встретить задания, требующие от учащихся речевых высказываний, соответствующих различным индивидуальностям. Составляя данные диалоги по развитию навыков русской разговорной речи, надо помнить о том, что учащиеся в разговорной речи должны знать гораздо больше, чем употреблять. Построение такой системы упражнений в соответствии с этапами формирования речевых навыков и умений позволяет классифицировать трудности. Каждому этапу соответствуют определенные упражнения: подготовительные, обеспечивающие усвоение определенного образца; упражнения, стимулирующие употребление данного речевого образца в сочетании с ранее усвоенными и перенесение его в реальную ситуацию; упражнения, связанные с программированием учеником самостоятельного высказывания (согласись, отрицай, подтверди).

Речевая ситуация – это фон для речевых действий [6], это «такая ситуация говорения, когда ученик чувствует себя или вместе с героем, или вместо героя» [7]. Такие ситуации создают на уроке атмосферу речевого общения, собеседования, обмена мнениями, позволяют детям активно включиться в диалог.



Диалогическая речь характеризуется эмоциональностью, употреблением междометий, вводных элементов, обращений, формул речевого этикета. В процессе общения диалогическая речь – это чаще всего неподготовленная, ситуативно-обусловленная речь. Диалогическая речь тесно связана с обстановкой, поэтому говорящим не требуется отражать в речи то, что дано им в непосредственном восприятии. Вследствие этого в диалогической речи реплики не могут быть отделены одна от другой, да и сам диалог непонятен без описания ситуации, в которой происходит диалогическая речь.

Таким образом, упражнения ситуативного характера являются активными формами работы на занятиях русского языка, так как они стимулируют языковую деятельность, приближают речь к естественному общению, развивают разговорные навыки и вызывают интерес учащихся к предмету. Использование ситуативно-коммуникативных упражнений поможет преподавателю добиться естественного стимулирования речевых высказываний учащихся на занятиях.

Список литературы

1. **Щерба А.В.** *Избранные работы по русскому языку / ред. М.И. Матусевич; Акад. наук СССР. Отд-ние лит. и яз. М.: Учпедгиз, 1957. 186.*
2. **Пассов Е.И.** *Учебное пособие по методике обучения иностранным языкам. Воронеж, 1975.*
3. **Черноусова Н.С.** *Словарная работа на уроках русского языка в IV – VIII классах. Киев, 1983. С. 26.*
4. **Акишина А.А., Казан О.Е.** *Учимся учить: для преподавателя русского языка как иностранного. 2-е изд., испр. и доп. — М.: Рус.яз. Курсы, 2002. — 256 с.*
5. **Akhmedova M.** *A system of exercises using situationally-communicative orientation. // International Journal of Advanced Science and Technology Vol. 29, No. 7, (2020), pp. 2189-2198.*
6. **Балыхина Т.М.** *Методика преподавания русского языка как неродного (нового): Учебное пособие для преподавателей и студентов. - М.: Издательство РУДН, 2007. - 185 с.*
7. **Брызгунова Е.А.** *Эмоционально-стилистические различия русской звучащей речи. – М.: Изд-во Моск. ун-та, 1984.*
8. **Вялютин М.Н.** *Теория учебника русского языка как иностранного (методические основы). - М.: Русский язык, 1984. - 144 с.*
9. **Гусева И. С.** *Говорение как вид речевой деятельности, речевого поведения, речевого взаимодействия на иностранном языке // Традиции и новации проф. деятельности преподавателя РКИ. Сб. статей. – М., РУДН, 2002, с.194-200.*
10. **Земская Е.А.** *Русская разговорная речь. Лингвистический анализ и проблемы обучения. – М., 2004.*
11. **Изаренков Д.И.** *Обучение диалогической речи. – М.: Русский язык, 1981.*
12. **Митрофанова О.Д.** *Методика преподавания русского языка как иностранного. – М.: Рус.яз., 1990.*
13. **Щукин А.Н.** *Практическая методика обучения русскому языку как иностранному. – М., 2003.*



A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS HINDUSTAN UNILEVER LIMITED WITH REFERENCE TO COIMBATORE

S. Gayathri

*B.Com Student, Department of Commerce, Dr. N.G.P. Arts and Science College (Autonomous),
Coimbatore*

Dr. S. Gandhimathi

*Associate Professor, Department of Commerce,
Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore*

Dr. S. Gunasundari

*Associate Professor, Department of Commerce,
Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore*

ABSTRACT

Hindustan Unilever limited formerly called as Hindustan lever limited is Indian's largest consumer products company and was formed in 1933. Headquartered was currently located in Mumbai. The Anglo-Dutch company Unilever owns in a Hindustan Unilever limited. The company was renamed in June 2007 "Hindustan Unilever limited". In 1931, Unilever set up its first Indian subsidiary, Hindustan Vanaspati Manufacturing Company, followed by Lever Brothers India Limited (1933) and United Traders Limited (1935).

KEYWORDS: *Hindustan Unilever limited, buying behaviour, awareness, preference.*

INTRODUCTION

Hindustan Unilever Limited (HUL) is India's largest consumer goods company based in Mumbai, Maharashtra. From 2004 to 2008 it has reduce the emission of carbon- di-oxide by more than 25%in the manufacturing.

HUL follows 5 R strategies to deal with the Green House Gases (GHG):

- Reduce
 - Re-use
 - Recycle
 - Recover
 - Renew
- ❖ HUL uses Agriculture wastages as the fuel (Ground nut shells, bagasse, saw dust, coconut shells, cashew, etc)

- ❖ DOMEK, a product of HUL is planning to sponsor the "world toilet day" on the 19th November every year.

PROJECT SHAKTI

- ❖ ICICI bank is the financial partner of HUL in the project Shakti

- As competition is increasing day by day, it's difficult to maintain the leader position & to further strengthen the distribution network HUL made a project called project SHAKTI which will serve the following purpose:

A) To reach

- Small, scattered settlements and poor infrastructure make distribution difficult.



- Over 5, 00,000 villages not reached directly by HUL.
- B) To communicate**
- Low literacy hampers effectiveness of print media.
 - Poor media-reach: 500 million Indians lack TV & Radio.
- C) To influence**
- Low category penetration, consumption.
- D) Awareness**
- Per capita consumption in Unilever categories is 33% of urban level.
 - Project Shakti

Scope of the Study

Research gap has been identified that previous researches only done on the brand loyalty, consumer behaviour of various products or on the marketing strategies of the products of Hindustan unilever ltd. Basic researches are found on the marketing strategies of Hindustan unilever ltd. Hindustan unilever ltd has variety of products, so need is to identify the consumer buying behaviour which include consumer preference, consumer satisfaction, brand loyalty regarding personal care products of Hindustan Unilever ltd. Data analysis of the study represents the analysis and interpretation of various questions asked by consumer who purchase personal care products of Hindustan Unilever ltd. The scope of the study is limited to consumer in coimbatore city only.

Statement of the Problem

In this competitive world of products with various similarities coming from different competitors such as similar price, packaging, quality, advertising tactics and more on, It makes it difficult for the company to target their specific audience because there are various competitors in the market offering the similar type of product and it's the responsibility of the company to position their products in such a way that it stands out from the market and the customer remembers the product, its logo, features and rest of its attributes very well.

OBJECTIVES OF STUDY

- To study about respondents awareness on Hindustan Unilever limited.
- To know the buying behaviour of respondents regarding Hindustan Unilever limited (HUL) Product.

RESEARCH METHODOLOGY

Research design:

A research design is purely and simply the framework of plan for a study the Guides

the collection and analysis of the data. The research is descriptive in nature.

Area of the study:

The study has been conducted in a Coimbatore city.

Sample size:

The sample size for the study is 150 respondents .

Sampling techniques

Convenience sampling techniques is used for a study.

Period of the study

The period of the study is from December 2020 to March 2021.

DATA COLLECTION METHOD

Source of data

Both primary and secondary data are used for the data collection.

Primary data

A primary data is a data which is collected for the first time for the particular interest to collect more information. In this study, the primary data was collected using questionnaire.

Secondary data

Secondary data consists of information that already exists somewhere, having been collected for some other purpose. In this study the secondary data was collected from Studies, Journals and Websites.

TOOLS USED FOR THE STUDY

The following tools were employed in tune with objectives of the study.

- Simple Percentage analysis
- Average Ranking analysis
- Weighted average analysis
- Chi-Square analysis

LIMITATION OF THE STUDY

1. The study confined to Coimbatore District only and hence the results cannot be generated to other areas.
2. Internal prejudice of the respondents serves as a limitation of the study.
3. Due to time constraints, the number of respondents taken for the study is limited to 150.

REVIEW OF LITERATURE

Shilpy Amphora (2014), the paper titled "A Study on advertising Fast Moving Consumer Goods"- The paper centres on promoting of quick moving customer products. Quick moving purchaser merchandise is commonly low overall revenue items and along these lines sold in expansive amounts. In this manner, it is essential to concentrate on the best way to enhance brand an incentive for the clients the same number of brands are accessible for similar



classes of items. Another region centered in the paper is the means by which subsidence influences the interest for quick moving Consumer Goods and what are the explanations behind these changes. In such a

circumstance, it winds up vital for the makers or the organizations to expand the interests in these brands and items with the goal that purchasers are pulled in towards them.

ANALYSIS AND INTERPRETATION

Simple Percentage Analysis

TABLE
CATEGORIES USED IN HUL BY THE RESPONDENTS

S.NO	CATEGORIES IN HUL	NO OF RESPONDENTS	PERCENTAGE
1	Soaps	43	28.7%
2	Skin care	50	33.3%
3	Hair care	48	32%
4	Oral care	9	6%
	TOTAL	150	100

Source: PRIMARY DATA

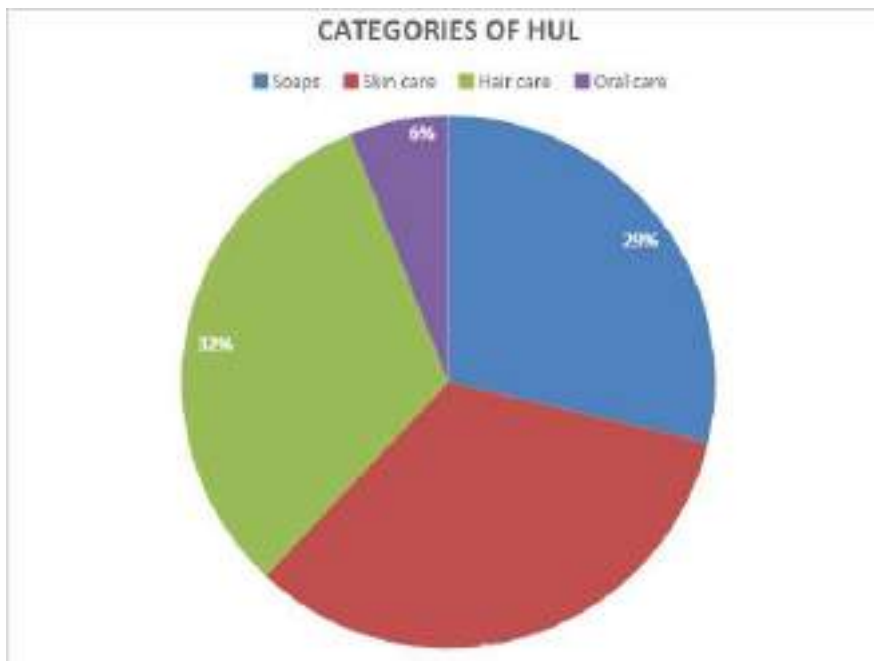
INTERPRETATION

The above table reveals the categories used in HUL by the respondents. 28.7% of the respondents are using soaps, 33.3% of the respondents are using Skin care products, 32% of the

respondents are using Hair care, 6% of the respondents are using oral care.

Majority (32%) of the respondents are using hair care product.

CHART
CATEGORIES USED IN HUL BY THE RESPONDENTS



**WEIGHTED AVERAGE ANALYSIS****TABLE
FACTORS INFLUENCE OF THE RESPONDENTS**

FACTOR	1(6)	2(5)	3(4)	4(3)	5(2)	6(1)	TOTAL	MEAN SCORE
Quantity	44 264	33 165	46 184	6 18	3 6	18 18	150 655	4.3666
Effectiveness	9 54	75 375	31 124	13 36	21 42	1 1	150 632	4.2133
Price	14 84	29 145	56 224	38 114	10 20	3 3	150 590	3.9333
Offer	14 82	41 205	27 108	33 99	26 52	9 9	150 557	3.7133
Packing	17 102	34 170	22 88	32 96	36 72	9 9	150 537	3.58
Advertising	18 108	31 155	22 88	33 99	20 40	26 26	150 516	3.44

INTERPRETATION

The above table justifies the factors influence of the respondents in Hindustan Unilever limited.

The highest mean score or average is rises to 4.3666 of the product.

CHI-SQUARE TEST**TABLE
RELATIONSHIP BETWEEN AGE AND CATEGORIES IN HUL THAT ARE USED BY THE RESPONDENTS**

S.NO	AGE	CATEGORIES IN HUL USED BY THE RESPONDENTS				TOTAL
		Soaps	Skin care	Hair care	Oral care	
1	below 20 years	17	8	2	1	28
2	21 to 30 years	18	25	27	6	76
3	31 to 40 years	4	15	10	1	30
4	above 40 years	4	2	9	1	16
	TOTAL	43	50	48	9	150

To find out the association between age and categories in HUL that are used by the respondents, chi square test is used and result is given below.

HYPOTHESIS

There is no significant relationship between age of the respondents and categories in HUL that are used by the respondents.

CHI-SQUARE TEST

Factor	Calculation value	Df	Table value	Remarks
Age	27.749 ^a	9	16.92	Rejected

INTERPRETATION

It is clear from the above table show that, the calculated value of chi-square at 0.05% level is less than the table value. Hence the hypothesis is rejected. So there is a relationship between age of the respondents and categories in HUL that are used by the respondents.

SUGGESTION

Majority of respondents needs more varieties in the brand.

Some of the respondents suggest improvement in the quality of the products.

Some of the respondents purchase HUL products in departmental stores.



CONCLUSION

This study is an attempt to focus attention of the brand preference towards HUL products. HUL is striving to lower the cost of our sourcing. Manufacturing and distribution processes while still maintaining and improving the quality of our products. Strong brands help to build the corporate image making it earlier to launch new brands and gain acceptance by distributors and consumers. Consumer wants the brand names to help them in quality, quantity, price, style, package, difference and shop. In the present study, factors and issues relating to brand awareness and prevailing for the HUL has been discussed. The finding help to identify the strong and weak points of various brand and suggestion have been framed with a view to generating higher degree of brand awareness, preference and satisfaction towards the Hindustan Unilever Limited.

REFERENCE

1. *Shiplely Amphora (2014), the paper titled "A Study on advertising Fast Moving Consumer Goods"*.
2. *Rd. Surinder Singh Kundu (2013), the paper titled "Customers Perception towards the Fast Moving Consumer Goods in market"*
3. *IJRA19J1645 International journal of research and analytical reviews(IJRAR)*
4. *International journal of science, engineering and management (IJSEM) VOL 3,Issue, April 2018*



PHILOSOPHICAL NATURE AND MISSION OF FAMILY AND MARRIAGE RELATIONS OF THE UZBEK PEOPLE

Komilov Ruzi Rabievich (PhD)

Associate professor of the Samarkand State Institute of Foreign Languages

ABSTRACT

Uzbek national wedding ceremonies have been forming for centuries, enriched and developed, supplemented with modern elements. Any ritual is a social reality that develops and improves. National wedding ceremonies of the Uzbek people are an aesthetic reality that has its own evolutionary development. The scope of the wedding ceremony makes the functions it performs dynamic, artistic, emotional and aesthetically pleasing. Aesthetic tools, techniques and colors are also factors that make family celebrations, shows and weddings memorable and enjoyable. Marriage ceremonies were formed expressively, thanks to their freedom and devotion to love. The actions of marriage ceremonies began to be adopted in folk art using them on holidays. It should be noted that modern wedding ceremonies, as a novelty, have acquired various flaws that cast a small shadow on national values. The article provides a philosophical analysis of the need for a clear regulation of the development of national values and the preservation of rituals with an understanding of their essence.

KEY WORDS: *Family, marriage, ceremony, innovation, transformation, wedding, happiness, tradition, morality, aesthetics.*

DISCUSSION

Within the existing institutional systems in society, marriage plays a constructive role in comparison with other institutions of civil society, developing in such a way as to correlate with existing reforms in time and space, and preserve its originality. In national marriage ceremonies, one can find such vital principles as adaptation, change, development, and innovation. As marriage brings innovation to a person's life, it introduces the concept of separate representations of the opposite sex, and linear thinking becomes non-linear. Consequently, at certain stages of life (puberty), marriage ceremonies, which can provide new concepts such as new strength, zeal and a happy life, have been shaped over the centuries as a vivid example of a special moral and aesthetic culture.

Farabi understands the concept of happiness as the achievement of well-being by people in life. According to him, "the essence of humanity is the achievement of true happiness. If a person turns this goal into his highest idea and desire, and uses all the possibilities, in this way he will achieve happiness." [1. 188]. The scientist emphasizes that the family plays an important role in fostering good behavior,

generosity and intelligence in a person. He claims that a man cannot achieve his goal without a family.

Beruni analyzes the formation of a family and marriage in accordance with views regulated by ethical norms, and comes to the conclusion that peace in every family depends on the peaceful coexistence of a couple, mutual respect, and mutual affection. His sermons on girls and boys are important, especially for today's youth. [2. 32].

Ibn Sina emphasizes the special role of women in the stability of marriage, and no matter how difficult it is during life to express a positive opinion about women or their interests, he attaches great importance to the role of women in the family and society. In his brochure "A Family Event", "the best of women are faithful to their husbands even in his absence." [3. 24]. She claims that if a woman is smart, she will be a faithful friend of her husband and the first helper in life, and unfaithful couples will lead the family to ruin.

A.Navoi's contribution to the aesthetic development of marriage ceremonies is enormous. In his book "Mahbub-ul-Kulub" ("Beloved of Hearts"), the scientist focuses on the qualities and upbringing that allow solving various situations in marriage, and



discusses the role of women in the family, including he recognizes:

Any woman can be good or bad. A good wife is the key to a happy and prosperous family. Living with such a wife is happiness, a companion on a bad day, a medicine for pain. One person will be ready to sacrifice itself for your health and peace. His soul is also lost, but God forbid, if he marries the wrong wife, peace and happiness will be lost. The indifference of a woman leads to the suffering of a man, the indifference of a man leads to complete disappointment, and a woman's aspiration for power leads to a life in spiritual torment. The poison of a woman's tongue can be destructive to others, and the fact that she is unclean can make her husband ugly [4. 25]. In his works, the scientist focuses on the aesthetic aspects of marriage ceremonies and through the artistic images that he creates in his works, reveals what a real husband and wife are, a place of love and affection. According to the great writer, both the moments of vision and his holiness are based solely on honesty.

According to the analysis of the above sources, national marriage rituals were the subject of research, the subject of research, which has always interested every thinker, and occupied a special place in his work. Thinkers pay more attention to aspects of the moral and aesthetic exaltation of marriage. The moral and aesthetic features of wonderful traditions in every region of our country have further enriched the wedding ceremony and embody both national and universal values.

Marriage ceremonies are a moral event embodied in premarital rituals and customs. It had to manifest itself first as a moral phenomenon, and then perform aesthetic functions. This is reflected in a number of popular proverbs about this, such as "If you give a girl, look at her father, if you take a girl, look at her mother," "See your mother and take your daughter," "Do not take a girl who is praised her mother, don't stay with the praised girl".

In the further development of the moral nature of marriage, religious sources and thinkers have paid particular attention to this area. For example, the hadith says: "When a bride gets married, she is divided into four things: wealth, beauty, origin, and the fourth is her religion [5. 54]", according to Imam al-Ghazali, age, height, wealth and origin of a woman [6. 58]". He also says: "In the following four areas, women should be more than men: 1. Beauty. 2. Literature. 3. Piety. 4. Behavior and behavior" [7. 58-59].

Analyzing the above scientific, religious sources, one can see that marriage rites acquired first moral and then aesthetic significance. It should be recognized that the development of these two directions, of course, had not only a positive, but also a negative impact on moral development. The

original moral essence of marriage ceremonies is that a man chooses a spouse to continue his offspring, gives her affection and tries to treat her well. Traditions, a variety of customs, gave the marriage ceremony an aesthetic spirit, and sometimes gave rise to flaws. Wedding ceremonies include those that are a source of demonstration of relaxation. Wedding ceremonies are considered the most spectacular and magnificent. It is a great celebration as a result of the wedding ceremony and (social, political).

In fact, a wedding is a great joy of life, a holiday for close and distant friends, relatives, a holiday of sweet melodies, a good time to listen to good melodies and songs, a variety of wrestling, and enjoy the spectacle of kupkari. , get to know the fun and joyful moments. to be A wedding is not a personal matter of a person, it is a ceremony that takes place on the initiative and participation of the general public [8. 126]. Since ancient times, our ancestors arranged national wrestling weddings for their children at circumcised weddings, and those who had the opportunity often held Kupkari weddings, and this tradition continues to this day. For such weddings, young wrestlers, dexterous and dexterous riders are naturally selected and selected. Traditions and customs have appeared, such as organizing joy at weddings, taking a short rest, introducing new young men and women who are ready to marry in public, selection.

Writing and fiction dating back to the recent past reflects people's artistic thinking, wedding ceremonies, and serves a spiritual and cultural function. The national mentality of our heroes Otabek and Kumush in Abdullah Qadiri's novel "The Last Days", reflecting the weddings and weddings of our people, emphasizes our national mentality. In his works, the writer Togai Murad skillfully includes in the plot text of his works samples of ritual folklore and national traditions that make up the rich spiritual heritage of our people, and unambiguously interprets their place and significance in the life of the people. The images of weddings in his stories "People Walking on the Moon", "The Stars Are Always Burning", "Horse Night" attract the reader. The wedding images between the protagonists of these stories, Tiger and Oimomo, reflect their engagement and other images associated with the wedding from the moment the bread is broken and from the beginning to the end of the wedding ceremony. Rituals and ceremonies reflect nationality and at the same time must fulfill such functions as preserving moral and aesthetic beauty. Even in the aforementioned past sources or artistic textual images, the authors emphasize the true nature of marriage ceremonies.

All the activities of the Uzbek people in the marriage ceremony are aimed at ensuring the well-being, kindness and happiness of those entering into



marriage, as well as rituals that are observed for the sake of procreation. Elements of religious magic also consist of rituals that wish the bride and groom fertility and protect them from all sorts of evil and evil eye. As noted above, "Gifts made by the participants in the ceremony, especially by the parents, are a tradition that will be passed on as financial support to the young family in the future. However, the main elements of the marriage ceremony are genetically related to the period of the ancient tribal system, and even today the problem of marriage persists as an important social phenomenon associated with the interests of society, and not with the interests of the individual. Because no society remained indifferent to the creation of a new family, which is its living cell, and attracted public attention by looking at it with great responsibility. Therefore, Uzbek weddings and other family rituals are still held with the participation of the general public"[9. 214-215].

In recent years, Uzbek weddings and other family celebrations outside the home in cafes and restaurants have brought about a generalization of gender and age traditions. In the late XX - early XXI centuries, transformational processes took place in the structure of marriage ceremonies, the change of which was primarily associated with the introduction of new traditions into the ritual process - an innovative situation. This is mainly due, firstly, to the desire to preserve the role of the original moral and aesthetic essence of marriage in traditions, to avoid changes, to preserve its core as a result of certain socio-political influences, to fall into a symbiotic state of traditions and modernity in national marriage ceremonies. as a result of transformational processes, one can observe the penetration of defects into the aesthetic and organizational parts of some marriage ceremonies, alienating them from their own traditions, moving them away from a single primary morality into another and transforming them.

Today, the aesthetic aspects of national weddings have been renewed, giving rise to a colorful image and philosophical observation in public life. In every region, from ancient times to the present, the marriage training ceremony is held at the home of the bride's father one, two or three days before the wedding. In this case, the groom and his friend, uncle or cousin go to the bride's house. With the consent of the youth, "Khutbay Nikokh" will be read, explaining to the boy and girl all the rules of the religious ceremony of marriage in a family under construction. After the wedding ceremony, women perform a series of rituals and rituals to take the bride to the groom's house. In many parts of the country (Samarkand, Navoi, Bukhara), when the bride approaches the groom, she is surrounded by a fire that is lit three times. The bride arrived in Astana and performed the rituals of "repentance" and "greetings

to the groom's relatives." The next day after the wedding, the rituals "bet ochar" and "kelin salom" are performed. Such Uzbek national weddings have not lost their role in society today.

Many scholars believe that the combination of Uzbek national wedding ceremonies with moral and aesthetic values is closely related to almost three thousand years of history. Today, this process includes rituals and traditions rich in moral and aesthetic ideals, from Avesto to Islam. In particular, the Uzbek marriage rites, which are associated with Islam, reflect the moral aspects of our people, such as hard work, childhood, hospitality, nobility, humanity, tolerance, and its aesthetics.

Our people enjoyed celebrating their centuries-old weddings, mostly in a close community, especially in the community to which they belong, in the area where they were born and raised. Existing moral concepts in marriage ceremonies promote light and darkness, good and evil, duty, conscience, humanity, honor, happiness, diligence, justice and ideals. Happiness in marriage is assessed on the basis of the category of virtue in perceived behavior in the interests of the family, society, people. Duty symbolizes a person's love for the Motherland, gaining people's trust, life in a team, a sense of duty and responsibility to the family, loyalty to them.

The presence of national, ethnic, cultural and religious unity in the marriage ceremonies of our people is an inexhaustible treasure of the spiritual awakening of our people. Their innate patience, natural norms necessary for religious tolerance in order to survive and develop after life's storms, have not lost their relevance today. Based on the above considerations, the following conclusions can be drawn.

First, the symbiosis arose as a result of the influence on the Uzbek national wedding rites of socio-economic, ideological, religious and other factors, as well as cultural changes associated with specific customs. The transformation of marriage ceremonies created these symbiotic states in the mirror of ethnoculture as "two phases of one apple". This, in turn, created the architecture of Uzbek national wedding ceremonies and values;

secondly, the transformation of the Uzbek national rituals of marriage was considered a novelty of that time and was carried out at the expense of the cultures of neighboring ethnic groups, which are part of the traditions and customs. In today's situation, we can link the transformation of Uzbek wedding ceremonies to an innovative environment. The fact that direct marriages have become a product of show business, that they are part of works of art and are demonstrative in nature, is a vivid proof of this;

thirdly, the aesthetic analysis of Uzbek marriage ceremonies showed that the ceremonial



rules, rituals and ethnoculture of the show have remained unchanged for centuries. A systematic analysis of the transformation of Uzbek national wedding ceremonies into the core of ceremonies suggests that the transformational environment of existing national ceremonies can be divided into private, ethnic or secondary innovations.

fourthly, Today, the creation of such a regulatory framework as improving the lifestyle of the population, preserving the nation's gene pool, strengthens its moral essence, and the work to preserve the aesthetic value of marriage ceremonies is combined with the aesthetics of a healthy lifestyle. Aesthetic reality, such as human health and the creation of healthy offspring, is just the process after a healthy marriage;

Fifth, the felicitological criterion of Uzbek marriage ceremonies creates an aesthetic reality due to its eudemonic nature. Uzbek marriage ceremonies are the main criterion for a person's happiness and are based on various mental characteristics: love, courtship, stereotypes. Marriage is mainly due to the love of young people, the spiritual connection of relatives let his imagination down.

LIST OF USED LITERATURE

1. *Pharobi Abu Nasr. City of noble people (Selected works): - T. : Abdulla Qodiri National Heritage Publishing House, 1993. - B. 188.*
2. *BoboevH., Hasanov S. Beruni's political and legal views // Life and law, 1996.-№ 3. - B. 32.*
3. *Some treatises of Ibn Sina on science and ethics // Translator and author of comments N.Turdiboev. - T. : Philosophy and Law, 2009. - B. 24.*
4. *Alisher Navoi. "Mahbub-ul qulub" .- T. : G. Gulom Publishing House of Literature and Art, 1983. - B. 25.*
5. *Safarov O., Maxmudov M. Family spirituality. - T. : Manaviyat, 2009. - B. 54.*
6. *Imam al-Ghazali. Marriage etiquette. - T. : Tashkent Islamic University Publishing and Printing Association. 2009. - B. 58.*
7. *Imam al-Ghazali. Marriage etiquette. - T. : Tashkent Islamic University Publishing and Printing Association. 2009. B. 58-59.*
8. *Qoraboev U.H. Holidays of the Uzbek people. - T. : Sharq, 2002.- B. 126.*
9. *Jabborov I. Ethnography of the Uzbek people. - Tashkent: Teacher. 1994. - B. 214-215.*



A STUDY ON ACADEMIC ANXIETY AMONG SECONDARY SCHOOL STUDENTS IN AIZAWL DISTRICT

¹M.S.Dawngliani, ²Prof. Lallianzuali Fanai, ³Dr. Vanlaltanpuui

*¹Research Scholar, ²Professor, ³Assoc. Professor.
MA (Edu.)*

*1913(P) IGNOU Centre, Institute of Advanced Studies in Education, Republic Veng,
Aizawl Mizoram 796005*

Article DOI: <https://doi.org/10.36713/epra6702>

DOI No: 10.36713/epra6702

ABSTRACT

The aim of this research is to study Academic Anxiety among secondary school students in Aizawl District. For this purpose, the sample was selected from different secondary school within Aizawl District. The sample consisted of 90 students. Out of 90 students, 47 male students and 43 female students were taken. 60 students form Urban and 30 from Rural areas while 45 each from class 9 and 10. Academic Anxiety Scale (AAS-Samrua) developed by Dr. Mohd. Abid Siddiqui and Dr. Atieq UI Rehman was used as a tool for data collection. Mean and t-test were used to analyzed the data. The findings of the study reveal that no significant difference was found in in relation to gender, Class and Locality. There is Above Average level of Academic Anxiety of secondary school students.

KEYWORDS - *Academic anxiety, gender, class, locality.*

INTRODUCTION

Anxiety disorders are the most common disorders that occur during adolescence. Anxiety can be of different types and academic anxiety is one of the anxieties. Academic anxiety is a kind of anxiety related to the learning institution, learning environment, ineffective study habits, a certain subject, the specific subject teacher or from the examination. It is a mutual feeling of nervousness, uneasiness, distress, stress or tension in a reaction to a certain school situation which is related to the academics

Anxiety is reasonable thing. It is right that a high level of anxiety hinders with concentration and memory. Without any anxiety, however, most of us would lack the motivation. A reasonable amount of anxiety truly benefits generating motivation. It plays significant parts in our lives and also a normal reaction to certain situations. A minor level of anxiety is usual, but severe anxiety can be a serious problem.

Academic anxiety is a sort of state anxiety which relates to the approaching danger from the environments of the academic institutions including teacher, certain subjects like Mathematics, English, etc. Academic anxiety can significant by the way of influencing the learners' mind set in the form of motivation to the academic success of the students while can be a factor to come down the academic achievement of student, so there is need to manage academic anxiety to improve the academic performance. If a student has social anxiety, the student might not be able to complete group tasks or might not feel comfortable asking for help in class. Social anxiety can go along with or even lead to academic anxiety.

RATIONALE OF THE STUDY

The world today is a global village even in Mizoram, due to the globalization and advancement of technology becomes a high competition in education. Besides that, students at secondary stage



who are adolescent having many confusions in their personal life. Students can feel easily anxiety related to every academic task. Some may only feel anxiety related to personal problem, and other may be academic tasks. Anxiety is not always negative. It can turn in to motivation for academic activity. There are many factors that increase anxiety among students that effect academic activities. There are ways to reduce anxiety in student So, the researcher is interested and felt that the importance to give sincere effort to study the Academic anxiety of Boys and Girls Students of Secondary School situated in Rural and Urban area.

Objectives of the study

1. To find out the level of Academic Anxiety of secondary school students in Aizawl District.
2. To compare Academic Anxiety of secondary school students in relation to gender.
3. To compare Academic Anxiety of secondary school students in relation to class.

4. To compare Academic Anxiety of secondary school students in relation to locale.

Hypotheses of the Study

1. There is no significant difference between Academic Anxiety of male and female students of secondary school students in Aizawl district.
2. There is no significant difference between Academic Anxiety of class 9 and 10 students of secondary school students in Aizawl district.
3. There is no significant difference between Academic Anxiety of students of Rural and Urban secondary school students in Aizawl district.

Population and Sample

The population consists of Aizawl district high school students. The sample for the present study consists of 90 students in the academic year 2020-2021.

Table 1
Distribution of sample of the study: (N=90)

VARIABLES	NO. OF STUDENTS	PERCENTAGE
SEX	MALE	47
	FEMALE	43
CLASS	9	45
	10	45
LOCALITY	URBAN	60
	RURAL	30

Tools Used

Academic Anxiety Scale (AAA-Samrua) developed by Dr. Mohd. Abid Siddiqui and Dr. Atieq UI Rehman was used for collection of data. AAA-Samrua consists of 44 questions having three types of answer like Agree, Undecided Disagree. The items in the questions has 6 dimensions such as Academic Anxiety symptoms, Anxiety from poor study habits, Anxiety from subjects, Anxiety from school environment, Anxiety from teachers, Anxiety from examinations.

The reliability of the scale was decided by split-half method (odd-even). It was calculated on N=600 and was found to be $r = +0.85$ which is highly significant at 0.01 level of significance.

Data Collection

AAA-Samrua are administered among the secondary school students in Aizawl district, Mizoram. The scores were noted and calculated by following the norm of scoring given in manual of the standardized scale.

Data Analysis

Statistical analysis through t-test was used to test the hypothesis. Percentage and mean were also adopted.

Analysis and Interpretation

Analysis and interpretation are done in accordance with the objectives of the study as follows:

1. To investigate the level of Academic Anxiety of secondary school students in Aizawl.



Table 2
Level of Academic Anxiety of secondary school students

SL.NO	LEVEL OF ACADEMIC ACHIVEMENT	NO. OF STUDENTS	PERCENTAGE
1	EXTREMELY LOW	0	0
2	LOW	1	1.11
3	BELOW AVERAGE	7	7.78
4	AVERAGE	24	26.67
5	ABOVE AVERAGE	42	46.66
6	HIGH	16	17.78
7	EXTREMELY HIGH	0	0
		90	100

From the above table, 42 students on Above average, 24 students score on average, there are 16 students on high level, 7 students score below

average, while only 1 student score low level, there is no students on the level of extremely low and extremely high.

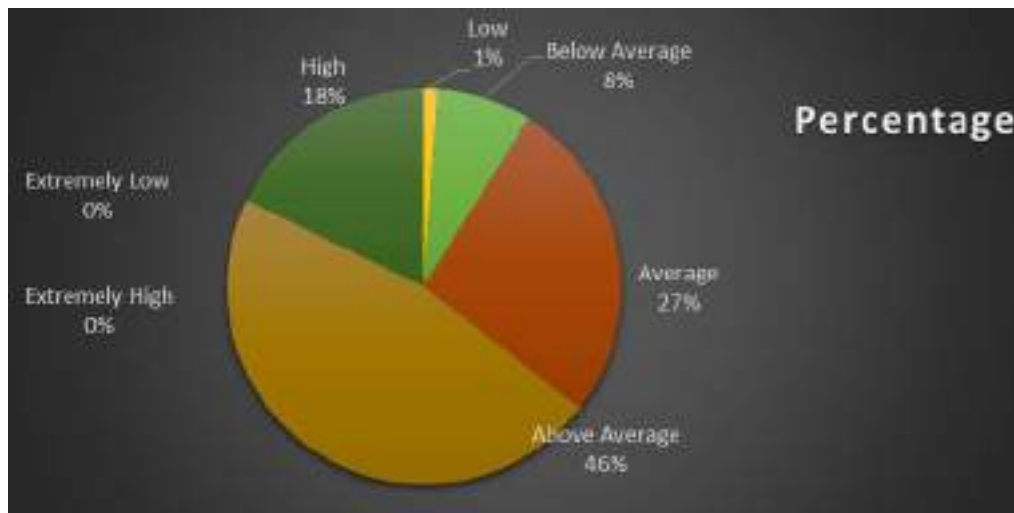


Figure 1: Percentage Scores of Academic Anxiety of the Students.

Table no. 2
Descriptive Statistics

Range	Highest score	Lowest score	Mean	Mode
42	97	55	83.14	89

Average score of 90 secondary school students is 83.14 which is the level of Above Average Academic Anxiety.

2. To compare Academic Anxiety of secondary school students in relation to Gender

H₀: There is no significant difference between Academic Anxiety of male and female students of secondary school students in Aizawl district.

Table 3
Comparison of Academic Anxiety of Male and Female Students.

Academic anxiety	N	Mean	t-value	Level of significant
Male	47	82.21	0.90	N.S
Female	43	84.16		



Analysis of data vide table no. 3 reflect the result for the test of significant differences between male and female students of secondary schools in relation to their level of Academic anxiety. The mean value for male and female students are 82.21 and 84.16 respectively. The table also reveals the t-value for the mean scores of male and female students towards Academic Anxiety level found to be 0.90 which is not significant.

Therefore, the null hypothesis no.1, there is no significant differences in the level of Academic Anxiety between male and female students of secondary schools is retained. This finding implies

that Academic Anxiety level of male and female students are not significantly different. Male and female students are not differed significantly in their Academic Anxiety.

3. To compare Academic Anxiety of secondary school students in relation to Class.

H₀2: There is no significant difference between Academic Anxiety of class 9 and 10 students of secondary school students in Aizawl district.

Table 4
Comparison of Academic Anxiety of class 9 and class 10 Students.

Academic anxiety	N	Mean	t-value	Level of significant
Class 9	45	84.38	1.14	N.S
Class 10	45	81.91		

Analysis of data vide table no. 4 reflect the result for the test of significant differences between class 9 and class 10 students of secondary schools in relation to their level of Academic anxiety. The mean value for class 9 and class 10 students is 84.38 and 81.91 respectively. The table also reveals the t-value for the mean scores of class 9 and class 10 students towards Academic Anxiety level found to be 1.14 which is not significant.

Therefore, the null hypothesis no.2, there is no significant differences in the level of Academic Anxiety between class 9 and class 10 students of

secondary schools is retained. This finding implies that Academic Anxiety level of class 9 and class 10 students are not significantly different. Class 9 and class 10 students are not differed significantly in their level of Academic Anxiety.

4. To compare Academic Anxiety of secondary school students in relation to Locality.

H₀3. There is no significant difference between Academic Anxiety of students of Rural and Urban secondary school students in Aizawl district.

Table 5
Comparison of Academic Anxiety of Rural and Urban Students.

Academic anxiety	N	Mean	t-value	Level of significant
Rural	30	80.17	1.08	N.S
Urban	60	82.32		

Analysis of data vide table no. 5 reflect the result for the test of significant differences between Rural and Urban students of secondary schools in relation to their level of Academic anxiety. The mean value for class Rural and Urban students is 80.17 and 82.32 respectively. The table also reveals the t-value for the mean scores of Rural and Urban students towards Academic Anxiety level found to be 1.08 which is not significant.

Therefore, the null hypothesis no.3, there is no significant differences in the level of Academic Anxiety between Rural and Urban students of secondary schools is retained. This finding implies that Academic Anxiety level of Rural and Urban

students are not significantly different. Rural and Urban students are not differed significantly in their level of Academic Anxiety

MAJOR FINDINGS

1. The result of the level of academic anxiety.

- Above Average (46.66%)
- Average (26.67 %)
- High (17.78%)
- Below Average (7.78%)
- Low (1.11%)
- Extremely low and Extremely High - NIL



2. There is no significant difference between Male and female, Class 9&10, Rural and Urban area among secondary school students in Aizawl District.

DISCUSSION

- If the students in the secondary stage have more academic anxiety, they cannot perceive a proper learning and it can lead to intended to drop out of school.
- Teachers, School Administrator and Parents cooperation for management of Anxiety of the learners is required. Guidance and counselling class, good home environment, teacher and students' relationship, motivations etc. may be an important factor for elimination of academic anxiety among secondary students.
- Gender wise analysis of the study results reveals that there is no significant difference between male and female students in their level of Academic anxiety. Similar result was found by (Azeem 2018), (Roa & Chaturvedi, 2017) in their Study of Academic Anxiety of Secondary School Students in Relation to Gender and Locality. Contradictory result was found by Sharma and Shakir (2019). It was found there was no significant difference between rural and urban areas' students of secondary school in their level of academic anxiety. Roa & Chaturvedi (2017) found that contradictory results the difference of rural and urban area.
- There is no significant difference between class 9 and 10 students in the level of academic anxiety, this result reveals that class 10 students are generally older than class 9 but they are not mature on the way of performing in their academic activities.

CONCLUSION

Academic anxiety interfered directly or indirectly the level of academic achievement of the students. A study on Academic anxiety in relation to academic achievement can be taken up among secondary and higher secondary level also. An educational planner or administrator can be framed some policies regarding management of anxiety in secondary stage.

REFERENCE

1. Azeem, M. A. (2018). *Study of Academic Anxiety and Academic Achievement of Secondary School Students. International Journal of Research in Social Sciences*, 8(3), 147-161. Retrieved on 4 September 2018, from https://www.ijmra.us/project%20doc/2018/IJRSS_MARCH2018/IJMRA13408.pdf
2. Kumar,A. (2013). *Relationship of Academic Anxiety among Adolescents in Relation to their Home Environment. International journal for research in education* 2(7), 32- 37.
3. Rao B. V., Ramana and Chaturvedi, Anjali(2017). *Study the Academic Anxiety of Secondary School Students in Relation to Gender and Locality. IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL)*,5(12), 59-62 , SSRN: <https://ssrn.com/abstract=3094169>
4. Sharma, S. & Shakir, M. (2019). *A study of Academic Anxiety of Senior Secondary School Students in Relation to Locale and Type of School. Research and Reflections on Education* 17 (4), 01-09. DOI: 10.13140/RG.2.2.35160.03846



CHRONICLE OF COURAGE: KASHKADARYA PEOPLE

Feruza Samatova

Teacher of the Department of History of Uzbekistan, Karshi State University

ANNOTATION

This article analyzes the selfless work of the people of Kashkadarya during the Second World War to strengthen the rear of the front to support the armed forces in factories and collective farms, the support of agriculture in the region. The article highlights how workers in the region contributed to the victory.

KEY WORDS: *World War II, Western Ukraine, Kashkadarya, city, village, newspapers, battles, Shakhrisabz combine, Karshi garment factory, artel "Mekhnat", "Communism", "New Life", "Red Peasant"*

DISCUSSION

In his speech at the reception dedicated to the Day of Remembrance and Honor on May 9, 2017, the President of the Republic of Uzbekistan praised the hard and courageous work of the people of Uzbekistan during the Second World War, noting: , arms, medicine, clothing, food. ... It would not be a mistake to say that the elderly, women and teenagers worked hard day and night in the factories relocated to Uzbekistan - an example of true devotion and heroism[1]. Also, in the resolution of the President of the Republic of Uzbekistan dated October 23, 2019 No PQ-4495 "On the worthy celebration of the 75th anniversary of victory in World War II[2]", in his speech at the ceremony dedicated to the 75th anniversary of Victory and the Day of Remembrance and Honor on May 9, 2020 serious attention is paid to this issue. "Today we have every reason to say that a new era in the study of our history during the Second World War has begun," said the President[3].

In the early days of the Second World War, mass mobilization was announced in Kashkadarya region, as well as throughout the country. On June 22, 1941, thousands of people rallied in towns and villages, enterprises and educational institutions, communities and state farms of Kashkadarya region. The men expressed their hatred for the invaders, took up arms and rushed to the defense. Many articles about frontline news were also published in the pages of existing newspapers in the region[4].

Workers of our region have expressed in the press that they are ready to work selflessly in

factories and collective farms to strengthen the rear of the front to support our Armed Forces.

At the beginning of the war, many Kashkadarya residents were serving in the army in various parts of the front. Their parents sent letters and telegrams urging their children to fight valiantly against the Nazis, to defeat the evil enemy and return victorious. A group of Karshi parents sent a telegram to their sons serving in Western Ukraine, urging them to show examples of courage, bravery and heroism in the fight against the Nazis.

The whole situation in Kashkadarya is the same as in our republic. In the autumn of 1941, despite the lack of machinery and manpower in the province, it consisted of harvesting grain and cereals without destroying the nest. As a result of the full mobilization of urban and rural workers for the harvest, the grain crop was quickly harvested[5].

The workers of the region also actively joined the nationwide movement. All enterprises have been adapted to produce products for the front. The production of warm clothes for warriors, beds, special clothes for hospitals, soldiers' shovels, sinkers was launched. Front brigades and workshops were formed to carry out military orders. The book winery began to produce high-quality alcohol and other products for the front. The teams of Shahrissabz ginnery and Karshi sewing factory also worked with high productivity. In 1944, the Karshi garment factory was awarded by the Government of Uzbekistan for its services in the field of frontline orders[6].



In the process of struggling to fulfill front orders quickly and efficiently, many labor torches, production heroes emerged. Workers of the Mehnat artel in Karshi Hazratqul Turakulov, Salomat Ahmedova, Khol Muhammadov, Muhabbat Tadjibayeva worked on the front lines during the whole war, did not leave their machines empty, fulfilled the daily labor norms by 1.5-2 times. Thousands of railroad workers competed and worked to double or exceed their tasks[7].

Despite unprecedented difficulties, construction work continued in the province. During the war, Karshi oil-extraction and engine-repair plants were put into operation. Water equipment was provided to provide the city of Karshi with drinking water, as well as power stations and housing were built. As early as 1942, it was decided to plant grain on 311.9 thousand hectares of irrigated land. The main workforce was women, adolescents, and the elderly, who worked selflessly for freedom. Retirees voluntarily began working in the fields en masse. In 1942, in Dehkanabad district, 420 elderly collective farmers each fulfilled the two-year labor norm[8].

From July 5 to August 5, 1943, a front month was held to harvest the grain. 270 Komsomol youth brigades uniting 10,970 people, 60,000 members of 1,330 student brigades took an active part in the grain harvest. Everyone involved in the preparation of the grain worked with courage.

During the war years, special attention was paid to cotton growing, and in 1943, 5 tst per hectare of cotton area in the region. In 1944 the figure was 11 tst. Formed[9].

“Communism” in Karshi district, “Yangi Turmush” in Kitab district, “Kizil Dehqon” collective farms in Shakhrisabz district have 25-30 tst per hectare. raised the threshing floor. People living in all towns and villages of Uzbekistan handed over bonds and valuables to the defense fund, and women handed over their jewelry. On September 9, 1941, the appeal of the members of the collective farm "Sharq Yulduzi" in Yangi Yol district of Tashkent region to all workers in Uzbekistan was published. Only in December 1941 did the workers of the region send gifts in a special echelon to the defenders of Moscow. These wagons contained more than 46 tons of wet and dried fruits, 304 kg of butter, several tens of thousands of eggs, 371 boxes of cigarettes and other food products collected by the population of Kashkadarya and Bukhara regions.

On February 12, 1942, representatives of the workers of Bukhara and Kashkadarya regions went to the front. The delegation included the chairman of the Karshi district executive committee Choli Begimkulov, the famous cotton grower Sharif Hamroev, and the flight engineer Goryachev.

Representatives of the workers took 23,226 kg of meat, 342 kg of butter, 381 kg of honey, 9,548 liters of grape wine, 213 head of cattle, 176,000 soums of money and clothes for the fighters.

Army soldiers sent letters of thanks to the workers of Kashkadarya for the gifts. Workers of Uzbekistan invest their money in "Soviet Uzbekistan", "Collective Farmer of Uzbekistan" tank columns and "Soviet Uzbekistan", spent on the formation of the Aviation Squadron. Norkuvvatov, chairman of the Kuybishev collective farm in Shakhrisabz district, handed over 20,000 soums and 10,000 soums in bonds, Omonov, a member of the Yangi Turmush collective farm in Miraki district, handed over 10,000 soums, and workers at the Mubarek plant handed out 191,500 soums and 51,375 soums in bonds. In a short time, 135 million soums were raised.

The children of the warriors were admitted to kindergartens in the first place. Weeks and months of assistance to the families of war invalids and servicemen were held in the region. A 1943 survey found that 14,323 families were receiving state benefits. During the inspection, another 5,150 families were provided with financial assistance, 1,695 families were provided with cows, and 3,612 families were provided with clothing. Providing friendly assistance to the districts liberated from the Nazis became a difficult but honorable task of our people during the war years. Workers of our region have extended a helping hand to the population of Leningrad, Moscow, Tula, Oryol regions, Stavropol and Krasnodar regions, where many clothes and food products were sent to the cities of these regions and regions.

The farms of our region took over the farms of the liberated districts, assisted them in providing them with tractors, combines and specialists. In February 1943, 80 tractors, 69 plows, 175 grain threshers and 15 trucks were sent from Kashkadarya to Stavropol and Krasnodar regions. 30 tractor drivers, 5 combine harvesters, 3 mechanics went to work in the liberated areas.

Workers of Kashkadarya region welcomed the evacuees with open arms. Orphans are raised with love. Reception and accommodation centers for displaced people have been set up at Kasan, Karshi, Guzar and Kamashi railway stations. The workers gladly welcomed their families in the front area into their homes and shared what they had with them. Until November 1941, the population of Kashkadarya provided housing and food to more than 30,000 people from Ukraine, Belarus, the Russian Republic and the Smolensk region.

So, during the Second World War, the unity of the Uzbek people was a bright manifestation in all



respects. The workers of the Kashkadarya region also faithfully fulfilled their international duties and made a worthy contribution to the victory over Nazi Germany.

LITERATURES

1. *Xalq so'zi*, May 10, 2017.
2. *Xalq so'zi*, October 24, 2019.
3. *President of the Republic of Uzbekistan Sh.M.Mirziyoev: We have new information about the participation of the people of Uzbekistan in the war.* <https://www.gazeta.uz/uz/2020/05/09/data/>
4. *Azimov H.I. Uzbeks during the Second World War.* - Tashkent: TSU Publishing House, 2006. - 180 p .;
5. *Golovanov A.A. Saidov I.M. The contribution of Uzbekistan to the victory over fascism.* - Samarkand: SamGU, 2006. Chast II. - 104 s;
6. *Irkaeva N. Kashkadarya and Surkhandarya regions during the Second World War.*-Tashkent, 2015;
7. *Ergasheva Yu. Safarova Z. Culture of Uzbekistan during the Second World War.* - Karshi, 2020
8. *Ziyoev H. Uzbekistan during the First and Second World Wars.* - Tashkent: "Muharrir" publishing house, 2011. - 96 p .;
9. *Turdiyev S. Chronicle of Courage. Kashkadarya in 1941-1945. Public assistance to families and children evacuated from the front line.* 107 p.



ART MANAGEMENT IN THE FIELD OF SOCIAL AND CULTURAL ACTIVITIES

Turabek Raufovich Fayziyev

PhD Technics, Director of the Branch Center for Retraining and in Service Training of Academic Staff Under Uzbekistan State Institute of Arts and Culture

ABSTRACT

This article discusses the role of art management in the socio-cultural environment. The impact of art management on cultural development is analyzed.

KEY WORDS: *management, art management, culture, cultural environment, culturological knowledge*

DISCUSSION

In contrast to the XX century, the turn of the XX and XXI centuries, according to many researchers, is a symbol of the birth of a new era, a boundary and a bifurcation point in the historical and cultural dynamics.

In the new era, culture is becoming one of the most important factors in the economic development of society. Culture is defined by us as a specific way of organizing and developing human life, represented in the products of material, spiritual and artistic activity, in the system of social norms and institutions, in spiritual values, in the aggregate of man's relations to nature, society, the other and to himself.

The naturalness of the inclusion of this type of production in the economy of any state is dictated by the fact that the production of cultural products and services, as well as their consumption, require certain resources (regulatory, personnel, material and technical, information and creative, etc.), and the same economic costs. Taking this into account, culture in the modern world is positioned as an independent branch of the socio-economic sphere, reflecting its spiritual-value and socio-normative aspects.

In this regard, it manifests itself as a special direction of the state and activities regulated by the state and society.

The production and consumption of cultural values, from the point of view of the activity and culturological approaches to social practice, are

aimed at solving certain socio-cultural problems of society. This is, first of all, the task of maintaining the sustainable development of social and cultural processes. The second is the task of reproduction of the subjects of cultural action and the inclusion of the individual in cultural activities, mediated by the national cultural heritage and the direction of development of the actual sociocultural process. And, thirdly, the task of developing a variety of types of activity in the spheres of spiritual, material and artistic production in culture and their effective use to solve the urgent problems of society.

The increasing complexity of the general structural, functional and organizational parameters of the entire sociocultural system contributed to the demand for its various types of activity. The latter were naturally formed into a system that received the name "sociocultural". This led to a deepening of the specialization of individual elements of this system, an increase in the level of their interaction, the definition of the universality and intensity of the functioning of both the system as a whole and its individual most important subsystems.

In the process of their actualization, sociocultural activities performed intermediary functions between the individual and the environment, participated in the intergenerational translation of the value core of the inherited culture, and supported its homeostatic function.

As noted by M.A. Ariar "... the nature of culture, gave rise to an equally wide, diverse and socially significant activity for its development,



dissemination and further development, which is integrated by the concept of “socio-cultural activity” Socio-cultural activity is today considered as a certain type human activity, the sphere of social and cultural practice, and an independent area of culturological knowledge”.

According to A.V. Sokolov, its generic concept is cultural activity. According to the generally accepted and legally enshrined formulation, cultural activity is the activity of subjects for the creation, preservation, dissemination, development and further development of cultural values. At the same time, the scientist put the analysis of the subjects of the latter as the basis for identifying socio-cultural activities as a separate type of cultural activity. In his opinion, the creators, custodians and users of cultural values are three social subjects: 1) personality, socialized individual; 2) formally organized or informal social groups; 3) society, society as a whole. Therefore, as the author further notes, depending on the subject of activity, cultural activity is divided into individual, group and mass. Each of them has its own characteristics, dictated by the nature of the subject and social tasks. [eleven]

Thus, individual cultural activity at the level of the individual and the socialized individual is the primary source of all cultural innovations. The solution of social problems of collective assessment and selection, distribution, storage in social time and space refers to the activities of social groups and society as a whole. It follows from this that cultural activity is subdivided, firstly, into individual cultural activity. It represents the cultural activity of an individual subject to create cultural values (self-realization of the individual); on the self-development of personal spiritual and physical potential (individualization of the personality); on the development of knowledge, skills and norms of the cultural use of material, spiritual and artistic cultural values (inculturation and socialization of the individual). Secondly, A.V. Sokolov, isolates socio-cultural activities that are significantly different from it in terms of functions and tasks. Being a complex social phenomenon, it covers a wide variety of cultural phenomena and various aspects of the life of society. However, despite its all-encompassing nature, SKD still has its own boundaries.

In a broad concept, socio-cultural activity is the cultural activity of social actors (professional and non-professional social groups, up to society as a whole) to socialize cultural innovations; the development of the abilities of individuals and the maintenance of their creative activity; social communication, i.e. distribution, preservation and public use of all types of cultural property. Its transformative nature allows the subject of socio-

cultural activity to constantly go beyond the current concrete situation, to overcome the underlying “programs”, thereby acquiring the form of cultural and historical creativity. In a narrower sense, socio-cultural activity is a socially expedient cultural activity of social subjects in the material, spiritual and artistic spheres.

The functions of social and cultural activity have determined its many directions and vectors of functioning. Their conditional division is based on the dominant function of social and cultural activity. So, the first direction of this activity is associated with the production of spiritual, material and artistic values of culture, both on a professional and amateur basis. It is carried out by professional specialists, as well as by lovers of social, artistic, scientific and technical creativity. Professional specialists are represented by scientists and designers, writers and artists, composers, actors and musicians, architects and designers, fashion designers, jewelers, etc. This direction oversees the innovation and creative activity of the subject as part of social and cultural activities.

The second direction reflects the multifaceted process of mastering cultural values. According to M.A. Ariar, it practically unites the entire population of the planet, which to a greater or lesser extent assimilate the riches of the world and national culture, its various components - from sanitary and hygienic, communicative, family and household to artistic, moral, legal, economic, political, ecological, physical, etc., The subject of this direction is, respectively, cognitive and educational activities.

The third direction is research, restoration, preservation, and popularization of cultural heritage among various groups of the population. It covers the social and cultural activities of museum workers, librarians, restorers, specialists in archival affairs and other forms of preserving historical memory and national cultural heritage and is a cultural conservation activity.

The fourth direction is focused on the transmission of cultural values, the transfer of diverse cultural experience from generation to generation, the inclusion of a person in cultural activities and the process of forming a person as a subject of cultural action.

This direction of social and cultural activity is provided by teachers of preschool, general education, secondary specialized and higher educational institutions, institutions of additional education, the system of advanced training, including social teachers who regulate the multidimensional and individually oriented processes of introducing a person to culture in an open social environment. This



area also includes the activities of guides, media workers, specialists in various forms of social and cultural activities, etc. Their information and communication, educational and upbringing activities represent certain vectors of the main direction of socio-cultural activities.

Of course, all areas are interconnected and constitute a single socio-cultural process that needs management and regulation. The regulation of these processes and the management of all types of activities inevitably required the allocation of updating one more direction.

This is the direction of socio-cultural activity, which ensures the management of cultural, socio-cultural and individual-cultural processes that support the dynamics of culture in all its diversity, implying further enrichment of its content, expansion of the forms of its manifestation and the development of the subject of cultural action. This direction is provided, first of all, by the socio-cultural activities of managers who perform organizational-intermediary, administrative-managerial and psychological-pedagogical functions of stimulating cognitive-educational, artistic-creative, entertainment-game, sports-health and other types of cultural activity of subjects. Thus, it is obvious that management activities are organically included in the social and cultural activities. Its tasks include: creating a favorable cultural environment, and stimulating innovative movements in the socio-cultural sphere; development, implementation of regional and other targeted socio-cultural programs and technologies; organizing the activities of centers contributing to the cultural development of the population and promoting the expansion and deepening of the work of structures of additional education; development of folk art and management of institutions, organizations, associations of the social and cultural sphere.

Management tasks cover almost the entire socio-cultural sphere. a special continuum of which is the artistic sphere. This is a specific branch of production and consumption of artistic values, ensuring their life and vitality in culture and society. In culture, the artistic sphere is represented by artistic culture and is a relatively independent layer of it.

Art culture encompasses all branches of artistic activity: verbal and musical, choreographic, theatrical, etc. It includes all the processes that ensure the vitality and development of art. These include such processes as creation, storage, popularization, development, broadcasting perception, etc., as well as processes that ensure the successful functioning of art (education of artists, public, critics, etc.). Accordingly, from the point of view of the activity approach, artistic culture is an aggregate method and

product of artistic activity of subjects of social and cultural activity.

At the end of the XX and beginning of the XXI century, art, as never before, actualized its potential and turned into a powerful means of educational influence on a person. Artistic activity, as part of the sphere of social and cultural activity, influencing the surrounding reality, becomes an important link in social practice and social life in general.

Artistic information began to be comprehended by psychologists, sociologists, culturologists as an invariant part of the information field of culture, which forms its spiritual core - the basis of the historical and cultural process. Artistic communication, provided by art, affects the sphere of solving the main tasks of socio-cultural activity - the formation of a subject of cultural action and the development of culture as the basis of social life. This is a kind of response to the crisis of the spiritual in modern man, culture and society. Through artistic communication, the integrity of the sociocultural process is ensured, which is supported by:

- Introduction of a person into the process of transcending (anticipating oneself, reaching a new level of development);
- searching and presenting an opportunity for its entry into the sociocultural stream;
- development of the ability of the subject of cultural action to go beyond the cultural flow, algorithms of action and imitation, as well as overcoming the “programming” of the cultures of social groups and broader social communities;
- and, finally, the formation of a person's abilities to transform the cultural flow, the inclusion of his individual-cultural and socio-cultural activities.

The “canvas” of the artistic life of society is densely penetrated by socio-cultural processes. Society has always depended on art as the nucleus of culture, a guide leading to the most complete embodiment in man of the best aspects of human nature, ensuring his harmony with the world and himself. In the modern world, a person is constantly in the space of art, directly and indirectly falling under its influence. Taking into account this, in the second half of the twentieth century, in various socio-cultural spheres, the need to ensure the processes of interaction between a person and art began to grow sharply.

Consideration of art from the point of view of value and cultural foundations expanded the range of its use in socio-cultural processes, human-forming and cultural-creative practices. These processes are an integral part of the in cultururation, socialization and cultural identification of the individual. For these reasons, art in the modern socio-cultural space acts as



the basis on which the formation of a cultured person, the development of his cultural-creative potential and personal spiritual qualities takes place. And artistic creation, in this regard, is considered as an alloy of the spiritual and the material, which has a spiritual content and material form. This spiritual and material integrity is usually called “artistry”.

The modern society with its normative value structure acts as a form of preservation and transmission of the spiritual and social, including the artistic experience of spiritual and practical artistic and creative activity. It determines the directions of the socio-cultural activities of the subjects, the guidelines for the production and consumption of art, the degree of actualization of the artistic life of society.

Art culture is an integral communication and information system. Its information began to be comprehended by psychologists, sociologists, culturologists as an invariant part of the information field of culture, which forms the spiritual core of culture, as the basis of the historical and cultural process. These positions determine the special social and cultural significance of art in the socio-cultural sphere.

In the social space, i.e. in the simultaneous life of the people of the country, region, of all mankind, artistic culture is designed to ensure the maximum efficiency of both the processes of creativity, the creation of artistic values, and the processes of their perception by the public, in accordance with their various spiritual needs. The languages of art occupy a special place in this process. Yu.M. Lotman classifies them as a “secondary modeling system” based on natural language, but which later received an additional, secondary structure of an ideological, aesthetic, artistic and other type. This allows literary texts to actively participate in socio-cultural processes, which include communication and information.

Paradigmatic shifts that characterize the modern stage of the historical and cultural process make the problems of managing social and cultural activities in the field of art one of the most important in spiritual and artistic production and consumption. In socio-cultural activities, they act as basic. Due to this, the main tasks of socially and culturally oriented activities in the socio-cultural sphere are the development of various types of art, the reproduction of its creators, the popularization and propaganda of highly artistic works of national and world culture, the artistic and aesthetic education of the audience, and the introduction of the wide audience to art.

In this regard, the new socio-economic situation in the country, the transition to market relations determine the need to strengthen the

management system of the artistic continuum of the socio-cultural sphere, taking into account its growing role in the art market.

The functional organization of artistic culture is expressed in the interaction of its following institutions: artistic production, which creates works of art as carriers of artistic values; artistic consumption, organizing the perception of a work of art; artistic criticism, which provides self-government of artistic culture as a process of artistic communication between people in accordance with the requirements for art by each type of society and culture. A special branch of art production is the organization of the reproduction of the creators of art values themselves - a system of training and education of new generations of artists, ways of their introduction to the existing culture.

The management of such complex and ambiguous processes in a new historical situation requires different approaches. Management strategy and tactics should concern, firstly, the area of providing, within the limits of financial resources, expanded production at a new level of high-quality intellectual and artistic products, cultural and educational services. Secondly, the reproduction of the resource base for the cultural activity of subjects and the creators of artistic values themselves through the system of training and education of new generations of Artists.

The intensively developing art industry, its special status in culture and the specificity of its existence dictates the need for ever greater differentiation in the processes of management and training of specialists for activities in the field of artistic culture. It has become an organic necessity to develop a field of knowledge that helps to guide the process of creating artistic values and promoting cultural products and services to the market as the results of artistic and creative activities.

The emergence of such professions as art manager, producer, promoter, impresario, concert agent, production manager, etc. due to the conceptualization of art management. The concept of art management in SKD. associated with the creation of a favorable cultural environment, with the implementation of the mechanism for involving people in the world of culture, the satisfaction and further development of the spiritual interests and needs of different groups of the population, with the technology of stimulating artistic and artistic and creative activities.

Using the presented rationale and methodological base, we come to the conclusion that art management is a socio-cultural activity that ensures the management of artistic processes in the socio-cultural sphere; it is a set of principles,



methods, production management tools for coordinating the actions of employees, services and realizing entrepreneurship opportunities in the art industry. As a field of knowledge, art management helps to manage the processes of production and consumption of artistic values and to promote the results of artistic and creative activities - cultural products and services - to the market. In the areas of social and cultural activities, he provides the artistic sphere.

Art management is an independent area of social and cultural activity and a component of cultural policy to regulate individual cultural activities and social and cultural activities of subjects in the field of art.

Management of processes in the field of art, modeling of artistic and artistic and creative processes, their culturological examination, socio-cultural design and the choice of appropriate technology in various areas of social practice, this is a far from complete list of tasks of art management.

REFERENCES

1. ZUNNUNOVA UMIDA GULOMOVNA, *Development Trends of the Organization of Information Processing at the Enterprise, INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY*, 2020, V 7, 2
2. Umida Zunnunova, *KINDS OF INNOVATION STRATEGY AND RISKS OF INNOVATIVE ACTIVITY*, "Мировая наука", 2019, V 22, 1
3. Mukhamedov Umar, Umirzokov Rakhmatilla, *Advantages of using computer graphics in the field of design, International Journal on Integrated Education*, 2020, V3, 1
4. Umida Gulomovna Zunnunova Sayyora Abdulhakovna Zakirova, Lelia Rus Pirvan, *CHALLENGES AND PROSPECTS IN ART HIGHER EDUCATION OF UZBEKISTAN AND ROMANIA, European Journal of Research and Reflection in Educational Sciences (EJRRES)*, 2020, V 8, 10
5. Umida Gulomovna Zunnunova, Sayyora Abdulhakovna Zakirova, Turabek Raufovich Fayziyev. "ACADEMIC AND ORGANIZATIONAL ASPECTS OF ENTREPRENEURSHIP EDUCATION IN ART UNIVERSITIES OF UZBEKISTAN." *Journal of Critical Reviews* 7.13 (2020), 1893-1897. Print. doi:10.31838/jcr.07.13.298
6. Sayyora Abdulhakovna Zakirova, *COMPUTER GRAPHICS AS A TOOL FOR THE DEVELOPMENT OF STUDENTS' CREATIVE AND INTELLECTUAL ABILITIES IN CLASSES ON THE BASICS OF INFORMATION TECHNOLOGY, ACADEMICIA An International Multidisciplinary Research Journal (Double Blind Refereed & Reviewed International Journal)*, 2020, V 10, 6
7. Zakirova Sayyora Abdulhakovna, *The Role of IT-Management in the Development of Information Technologies, International Journal of Advanced Research in Science, Engineering and Technology, India, National Institute of Science Communication and Information Resources*, 2020, V 7, 2
8. Аллаярова Солиха Нарзуллоевна АХБОРОТ-КОММУНИКАЦИЯ ТЕХНОЛОГИЯЛАРИ ОЛИЙ ТАЪЛИМ СИФАТИ ВА САМАРАДОРЛИГИНИ ОШИРИШ ОМИЛИ // *Современное образование (Узбекистан)*. 2020. №4 (89). URL: <https://cyberleninka.ru/article/n/ahborot-kommunikatsiya-tehnologiyalari-oliy-talim-sifati-va-samaradorligini-oshirish-omili> (дата обращения: 27.04.2021).
9. Allayarova S. N. *Implementation of Modern Information Communication Technologies (ICT) in Higher Education Sector: International Experience and The Example of Uzbekistan //International Journal of Innovative Technology and Exploring Engineering*. – 2019. – Т. 9. – №. 1. – С. 386-392.
10. Hakimovich, H. N., Khodiyevna, R. R., Mustafakulovna, M. O., & Narzulloevna, A. S. (2020). *EDUCATION SYSTEM MISSION IN THE CONDITIONS OF CIVIL SOCIETY DEVELOPMENT. Journal of Critical Reviews*, 7(5), 832-837.
11. Narzulloevna A. S. et al. *MODERN PEDAGOGICAL METHODS IN EFFECTIVE ORGANIZATION OF LESSONS //Journal of Critical Reviews*. – 2020. – Т. 7. – №. 9. – С. 129-133.
12. Boltaeva M. L. et al. *ANALYSIS OF TRADITIONAL AND INTERACTIVE TEACHING AND MODELS OF ITS APPLICATION //Journal of Critical Reviews*. – 2020. – Т. 7. – №. 7. – С. 1577-1587.
13. Исмаилова З. К., Болтаева М. Л., Джураева С. Н. *Профессиональная ориентация школьников-как один из факторов формирования будущих профессиональных компетенций конкурентоспособных специалистов //Высшая школа*. – 2017. – №. 6. – С. 52-53.
14. Turgunov S. T., Kazimov J. S. *ORGANIZATION AND MANAGEMENT OF PEDAGOGICAL PROCESSES IN SECONDARY SCHOOLS ON A SCIENTIFIC BASIS //European Journal of Research and Reflection in Educational Sciences Vol.* – 2019. – Т. 7. – №. 12.
15. Тургунов С. Т. *СТРАТЕГИИ И СТРАТЕГИЧЕСКОЕ УПРАВЛЕНИЕ–ОСНОВА ЭФФЕКТИВНОЙ ДЕЯТЕЛЬНОСТИ ОБРАЗОВАТЕЛЬНЫХ УЧРЕЖДЕНИЙ //ЯЗЫК И АК*. – 2016. – С. 48.
16. Тургунов С. Т., Ахмаджонова Н. М. *Особенности управления дошкольными образовательными учреждениями //Вопросы гуманитарных наук*. – 2012. – №. 2. – С. 80-82.



INHERITANCE AS AN IMPORTANT FACTOR IN FORMING A CULTURE OF TOLERANCE IN YOUNG PEOPLE

Isroilov Bektosh Erkinovich

Candidate of Philosophical Sciences, Associate Professor, Tashkent Institute of Textile and Light Industry

ANNOTATION

This article philosophically has been revealed the issues of forming a culture of tolerance among young people through the traditions of succession and strengthening it on the basis of science and enlightenment, and scientifically based on the fact that inheritance is an important factor in forming a culture of tolerance among young people.

KEY WORDS: *tolerance, continuity, young generation, morality, spirituality, education, globalization, nation, education, mentality.*

DISCUSSION

In our country, special attention is paid to the development of a culture of moral tolerance of young people on the principles of humanity, enlightenment, honesty and the process of educating them on the basis of our national mentality. "Raising a culture of tolerance in our country, strengthening mutual understanding and solidarity between nations and religions, educating the younger generation on this basis are identified as one of the priorities of state policy..."[1]. In this regard, it is vital to philosophically study the fundamental foundations of the national language, history, literature, culture, customs, national mentality, temperament, way of life, the culture of tolerance to the younger generation, as well as the tendencies to promote it. remains.

The rules of tolerance did not appear all at once, but were passed down from ancestors to generations through the traditions of inheritance as a product of the historical experience of each nation. It helps young people to be resilient, to be patient, to ease our mental state and even our lives, to endure various hardships and unpleasantness in life. Because every young person interacts with the older generation in everyday life. A culture of tolerance is part of a common culture, and it has its own characteristics. Tolerance is used as a synonymous concept with tolerance. The fields of research have

advanced different views on this concept, depending on the nature of the research objects. In particular, tolerance in the "Brief Dictionary of Philosophy" "tolerance (lat. Tolerantia - endurance, patience) - tolerance, tolerance for the lifestyle, behavior, manners, feelings, opinions, ideas and beliefs of others." [2]. Based on his analysis, the young researcher Yunus Khalikov described the culture of tolerance as a culture of tolerance and respect for the free environment, worldview, manners, customs, feelings, thoughts, beliefs and actions of each person [3]. Inheritance is the bullet root of tolerance, the mainstay, the invaluable heritage of our ancestors. The main task of our intellectuals is to convey the essence of these concepts to the minds of the younger generation and to convey them to the program of life. While spirituality is the driving force of the intellectual and spiritual world of the perfect person, possession of historical memory, assimilation of ancestral heritage, in a word, inheritance is a solid foundation of spirituality. So, if the basis of perfection is spirituality, then spirituality is the main source of nourishment and inheritance. The ultimate goal of our work in the field of spirituality is to form the spirituality of the younger generation with a strong faith, free will, active citizenship. That is, to bring up a perfect person - a perfect person, who has an independent worldview, who lives on the invaluable heritage of our ancestors



and modern thinking. Succession, therefore, is the heart of the nation's spirituality, the driving force, the bridge between ancestors and generations, the dialectical harmony between yesterday and today. For thousands of years, the peoples of the world have maintained their national identity and mentality, ensuring spiritual unity between different eras and ancestors by protecting it from any influences and pressures by remaining faithful to their traditions and customs, ceremonies and celebrations.

The philosophy of inheritance includes elements of language, culture, customs, national mentality, temperament, handicrafts, agricultural production, as well as the preservation, assimilation, assimilation and promotion of identity in the younger generation. Achieving harmony between the spirituality of the older, middle and younger generations is important in the formation of a perfect human personality. Recognizing the idea of national and religious tolerance as a high spiritual value, as President Shavkat Mirziyoyev "Development of a culture of tolerance and humanity, strengthening interethnic and inter-citizen harmony and harmony, educating the younger generation on this basis, in the spirit of love and devotion to the Motherland have been identified as one of the most important priorities of state policy in Uzbekistan. All of this has been proven in real life." [4]

Also, the Law of the Republic of Uzbekistan No. LRU-406, which contains 33 articles, Chapter 4 of the Law of the Republic of Uzbekistan "On State Youth Policy" dated September 14, 2016, which was adopted for the first time after taking office, once again proves the urgency of this issue. The decision of a tolerant person with a culture of independent thinking, work and life, on the one hand, depends on the intellectual potential of society, the effectiveness of educational and ideological work in society, on the other hand, the cultural level of young people is directly related to independent thinking. One of the main ideas of the ideology of national independence-tolerance means that people of different nationalities and ethnic groups, people of different religions live in the same land, in the same country, in the same region, as partners, like-minded, united in the path of noble ideas, dreams, goals and intentions. In order to accelerate the social changes taking place in our country, it is necessary to raise the cultural level of young people, the culture of tolerance. Especially in today's world of globalization, the rapid spread of "popular culture", the world's young people are exposed to all sorts of vices, various groups and movements that are alien to our spirituality are trying to poison the minds of young people. indicates that it is standing. Usually, the problem of understanding the world, the attitude to life is formed between the older generation and the young, the two different

approaches are formed. This issue is especially relevant in the Western world, where young people and adults are becoming spiritually alienated from each other and it is a serious problem that it has become customary to live on the basis of two different interpretations, two mutually contradictory, essentially opposite cultural needs. At the root of this are two major social foundations, namely, the complete absence of public ideological influence on the state and public control; while it is widely promoted as a vital position, the second aspect is that the millennial tradition of succession between adult and youth spirituality is disappearing. When the traditions of succession are broken, any society begins to shine from within. When the level of social connection between the worldviews of adults and young people is high, that is, when there is a state of consensus, the way of life in society will be calm, peaceful and orderly. If there is a big difference between the political, cultural, moral and material views of adults and young people, and if the social connection between people is weak, that is, if a compromise is formed, society will be on the brink of confrontation. If this weak connection in society, that is, the state of compromise, is broken, social tensions in society will increase, and conflicts will begin to occur. Therefore, the causes of the current unrest in many countries of the world can be traced to the breakdown of inheritance between different segments of the population, adults and youth, the disappearance of mutual understanding within one nation, the formation of different worldviews, tastes and levels.

In the space where we live, feelings of tolerance have long been valued. "Our ancestors have lived in this region for thousands of years on the basis of national values, and even today we can say that history and life, nature itself have given us - all the peoples of Central Asia such friendship and encourages co-operation." [5]

Therefore, our people have always lived on the principle of respect for the great and the small. Age plays an important role in human relationships. The opinions of older people have been the basis for collective decision-making. The elderly are understood as those who move to a family or neighborhood, to the circle of their peers, limiting their social work activities to a certain extent for objective and subjective reasons. The elderly have an important social responsibility, such as the ancestral way of life, spirituality, inculcation of culture in the minds of the younger generation. Therefore, at the heart of all educational work is the relationship between ancestors and generations, which can be called a dialectical harmony between yesterday and today. For thousands of years, the peoples of the world have relied on the teachings, guidance and advice of the older generation to protect their



traditions and customs, ceremonies and celebrations from any influences and pressures, and thus to preserve their national identity and mentality. After all, the older generation instills the spirituality of the nation in the younger generation through the traditions of inheritance.

Traditions of inheritance include the preservation, assimilation, assimilation and promotion of culture, customs, national mentality, temperament and lifestyle identity to the younger generation. It is known that most Uzbek families are home to the older generation of grandparents, parents, aunts, uncles, the middle generation and the younger generation.

Children are often subjected to parental pressure. They demand that their children unconditionally do what they say. Grandparents, on the other hand, provide more counseling and educational advice to young people. Even if they don't do what their grandchildren say, they don't quarrel too much. Demonstrating patience, they expect the most accurate conclusion to be matured naturally in children.

Children become accustomed to the over-expression of parental affection for their children and seek to express the affection they receive from their parents to their peers and other loved ones. Parents, on the other hand, wait for the response of the kindness bestowed on their children without realizing that it will return to them, not to others.

As a result, conflicts arise between children and parents, and there is no way to find an alternative solution other than leaving it in the form of a postponement. It should be noted that at present the issue of the negative impact of excessive parental love or excessive pressure on their children in the educational process has not been sufficiently scientifically studied. In this process, the role of the older generation, ie grandparents, is great. Grandparents play an important role in the upbringing of a person as an example, that is, firstly, grandparents have a direct educational influence on the younger generation, and secondly, indirectly through parents, aunts, aunts and uncles.

Consequently, if traditions and customs, way of life are the towers and buildings of the nation, inheritance is the main bulwark of the nation, protecting its spirituality.

Therefore, if the fortress collapses, the buildings and towers, the nation's identity will be set on fire. The mentality of the nation, and therefore the character of the people, plays an important role in the system of succession. At present, the majority of the world's peoples are undergoing a change of national character and mentality. In particular, the qualities of patriotism and political beliefs, which are the core of the nation's identity, are being seriously damaged. Most worryingly, human aspects such as conscience,

aria, and integrity are viewed not as traits that help an individual to adapt to society, that is, to adapt successfully, but as hindering traits. In order to form a culture of tolerance among young people through the traditions of succession and to effectively inculcate it in their minds, it is necessary to systematically implement the following:

to emphasize the positive nature of the age-old traditions of our people, first of all, in the family environment, and for this purpose to pay attention to increasing the daily contact time of parents and grandparents with their children;

Strict control by educators and the public of the content of youth communication on the Internet in order to achieve a harmonious combination of knowledge and education in the classroom of educational institutions, to control them from the influence of foreign sites that promote destructive ideas;

Regularly organize educational events in schools, colleges and lyceums with the participation of various young people in the field of literature, art, science and culture, as well as systematically organize various contests, quizzes, competitions on the basis of respect for the spiritual heritage of our people.;

It is advisable to hold regular and scheduled creative meetings with scientists, writers and poets on the theme of succession and spirituality, and to organize these meetings in groups rather than in public.;

It is expedient to form a minimum of artistic, scientific and educational educational literature, which must be mastered by pupils and students in order to effectively master the heritage of great ancestors in educational institutions.

REFERENCES

1. Mirziyoev Sh.M. *To the participants of the international conference "Islamic Solidarity: the example of Uzbekistan and Azerbaijan". - Tashkent city. October 18, 2017 // Mirziyoev Sh. The consent of our people is the highest value given to our activities. 2 vols. - T. : "Uzbekistan", 2018. - pp. 455.*
2. *Philosophy. Brief annotated dictionary. Editor-in-Chief: Abdulhofiz Jalolov, Doctor of Philosophy. -T.: "Sharq", 2004. - pp. 308.*
3. Kholikov Yu. *Ethical issues of forming a culture of tolerance in youth. Fals. fan. height (PhD) ... dis. avtoref. - Samarkand, 2020. - B. 12.*
4. Mirziyoev Sh.M. *We will resolutely continue our path of national development and raise it to a new level. Volume 1 - T. : "Uzbekistan", 2018. - pp. 295.*
5. Karimov I.A. *High spirituality is an invincible force // - Tashkent: "Spirituality", 2008. - B. 10.*
6. Narzulloevna A. S. et al. *MODERN PEDAGOGICAL METHODS IN EFFECTIVE ORGANIZATION OF LESSONS //Journal of*



Critical Reviews. – 2020. – T. 7. – №. 9. – С. 129-133.

7. Allayarova S. N. *Implementation of Modern Information Communication Technologies (ICT) in Higher Education Sector: International Experience and The Example of Uzbekistan //International Journal of Innovative Technology and Exploring Engineering.* – 2019. – T. 9. – №. 1. – С. 386-392.
8. Hakimovich, H. N., Khodiyevna, R. R., Mustafakulovna, M. O., & Narzulloevna, A. S. (2020). *EDUCATION SYSTEM MISSION IN THE CONDITIONS OF CIVIL SOCIETY DEVELOPMENT.* *Journal of Critical Reviews*, 7(5), 832-837.
9. Abdullaeva, N. B. (2015). *THE ESSENCE AND CONTENT OF THE AESTHETIC COMPONENT IN DESIGN.* *ISJ Theoretical & Applied Science*, 9(29), 169-171.
10. Абдуллаева, Б. (2014). *Диалектическое видение эстетического компонента в дизайне.* *Credo new*, (3), 14-14.
11. Абдуллаева, Н. Б. *Дизайн как фактор формирования культурного пространства.* *Фалсафа ва ҳуқуқ*, 2/4/2017, 70-72.



ON A DIFFERENTIAL EQUATION WITH AN INVOLUTION BY

G. A. Sodikova

Assistant, Fergana Polytechnic Institute

ABSTRACT

Currently, research is being conducted in various directions in the field of differential equations with involution. This article covers a single differential equation with an involution.

KEYWORDS: *differentiation, involution, order, argument, equations, solutions.*

ОБ ОДНОМ ДИФФЕРЕНЦИАЛЬНОМ УРАВНЕНИЕ С ИНВОЛЮЦИЕЙ

**Г.А.Соди́кова, ассистент
Ферганский Политехнический институт**

Аннотация: В настоящее время проводятся исследования в различных направлениях в области дифференциальных уравнений с инволюцией. В данной статье освещено об одном дифференциальном уравнение с инволюцией.

Ключевые слова: дифференциация, инволюция, порядка, аргумент, уравнения, решения.

Впервые в работе [1] получено общее решения уравнения $y' = y\left(\frac{1}{t}\right)$ решения получено в [2] с другим методом. В настоящее время проводятся исследования в различных направлениях в области дифференциальных уравнений с инволюцией. В этой работе мы приведем общее решения уравнения второго порядка с инволюциями

$$y'' = y'\left(\frac{1}{t}\right).$$

Производя замену аргумента $t \rightarrow \frac{1}{t}$ в уравнение (1) получим, что



$$y'' = y' \left(\frac{1}{t} \right), t \in R^+.$$

Дифференцируя уравнения (1) с учетом (2) имеем $t^2 y'''(t) + y'(t) = 0$. С умножением на t это уравнение сводится к уравнению Эйлера

$$t^3 y'''(t) + ty'(t) = 0.$$

Характеристическая уравнения (3): $\lambda(\lambda-1)(\lambda-2) + \lambda = 0$, имеет корни $\lambda_1 = 0$,

$\lambda_{2,3} = \frac{3}{2} \pm i \frac{\sqrt{3}}{2}$, то общее решения (3) можно представить в виде

$$y(t) = C_1 + t^{\frac{3}{2}} \left[C_2 \cos\left(\frac{\sqrt{3}}{2} \ln t\right) + C_3 \sin\left(\frac{\sqrt{3}}{2} \ln t\right) \right].$$

Решение уравнения (1) будем искать в виде (4). Тогда получим связь между произвольными коэффициентами: $C_3 = -\frac{1}{\sqrt{3}} C_2$ и $C_3 = 2C_2$

Общее решения уравнения (1) при $C_3 = -\frac{1}{\sqrt{3}} C_2$:

$$y(t) = C_1 + C_2 t \sqrt{t} \left[\cos\left(\frac{\sqrt{3}}{2} \ln t\right) - \frac{1}{\sqrt{3}} \sin\left(\frac{\sqrt{3}}{2} \ln t\right) \right] =$$

$$C_1 + \frac{2}{\sqrt{3}} C_2 t \sqrt{t} \cos\left(\frac{\pi}{6} + \frac{\sqrt{3}}{2} \ln t\right) = A + B t \sqrt{t} \cos\left(\frac{\pi}{6} + \frac{\sqrt{3}}{2} \ln t\right).$$

а при $C_3 = 2C_2$:

$$y(t) = C_1 + C_2 t \sqrt{t} \left[\cos\left(\frac{\sqrt{3}}{2} \ln t\right) + \sqrt{3} \sin\left(\frac{\sqrt{3}}{2} \ln t\right) \right] =$$

$$C_1 + 2C_2 t \sqrt{t} \cos\left(\frac{\pi}{3} + \frac{\sqrt{3}}{2} \ln t\right) = C + D t \sqrt{t} \cos\left(\frac{\pi}{3} + \frac{\sqrt{3}}{2} \ln t\right).$$

Следовательно, решением уравнения (1) могут быть функции

$$y(x) = A + B t \sqrt{t} \cos\left(\frac{\pi}{6} + \frac{\sqrt{3}}{2} \ln t\right), \text{ и } y(x) = C + D t \sqrt{t} \sin\left(\frac{\pi}{6} - \frac{\sqrt{3}}{2} \ln t\right).$$



Где А,В,С и D произвольные постоянные.Проверка показывает, что вторая функция не удовлетворяет уравнению (2).Таким образом общим решением уравнения (1) является функция

$$y(x) = A + Bt\sqrt{t} \cos\left(\frac{\pi}{6} + \frac{\sqrt{3}}{2} \ln t\right).$$

ЛИТЕРАТУРА

1. Silberstein L.Solution of the equation.Lond.Edinb.Dubl.Phil.Mag.30 (200),185-186 (1940)
2. Винер И.Я.Дифференциальные уравнения с инволюцией. Дифференциальные уравнения, 5 (1969), 1131-1137.
3. Потапкин Н.Н., Вишнеvский С.А., Ашрятов А.А. Повышение энергоэффективности осветительных установок общественных помещений // Современные проблемы науки и образования. – 2015. – № 2-1
4. Obidov, J. G. O. (2020). About safety technique and issues of supplying electricity of the textile industry. ACADEMICIA: An International Multidisciplinary Research Journal, 10(9), 123-127.



УДК.631.3.071.4

RULES FOR THE CHARACTERISTICS OF TRACTOR TIRE PARAMETERS ON A NON-HORIZONTAL SUPPORT SURFACE

Melibayev Mahmudjon

Candidate of Technical Sciences, Associate Professor

Dadahodzhaev Anvarjon

*Candidate of Agricultural Sciences, Associate Professor, Namangan Civil Engineering Institute
(Nam CEI) Republic of Uzbekistan, Namangan*

ABSTRACT

The article deals with the main questions about the service life of pneumatic tires of machine and tractor units that depend on operational and agrotechnical indicators, the reasons for reducing the resource and the scientific basis for increasing the resource.

KEYWORDS: *machine, tractor, unit, tires, operation, load, resource, wheel, pneumatic, pressure, design.*

ХАРАКТЕРИСТИКА ПАРАМЕТРОВ ТРАКТОРНЫХ ШИН НА НЕ ГОРИЗОНТАЛЬНОЙ ОПОРНОЙ ПОВЕРХНОСТИ

Мелибаев Махмуджон

Кандидат технических наук, доцент

Дадаходжаев Анваржон

Кандидат сельскохозяйственных наук, доцент

Наманганский инженерно-строительный институт (Нам ИСИ)

Республика Узбекистан г. Наманган

Аннотация: В статье рассматриваются основные анализ изменения максимального давления на почву для различных вариантов внутреннего давления в шинах и вертикальной нагрузки на колесо. Представлено теоретическое обоснование и провели эксперимент, чтобы выявить возможности использования общие характеристики шины при оценке изменения контактного давления колесного движителя на почву.

Ключевые слова: машина, трактор, агрегат, шины, эксплуатации, агротехника, нагрузка, колесо, пневматические, давление, конструкция.



Повышение технического уровня и обеспечение эксплуатационных и агротехнических показателей машинно-тракторных агрегатов (МТА) взаимосвязаны и постоянно находятся во внимании их конструирования [1,2]. Однако ряд вопросов по оценке воздействия колёсного движителя на почву не горизонтальной поверхности является основным вопросом для хлопкосеяния в условиях предгорных районов Республики Узбекистан. Так, установлено, что определяющим параметром, характеризующим уровень эксплуатационного и агротехнического воздействия МТА при работе, служит их максимальное давление на почву при обработке хлопчатника. Вместе с этим до настоящего времени нет рекомендаций по расчетному методу определения внутреннего давления воздуха в шине, соответствующего размеру шин и давлению на почву.

Цель исследования - выявление закономерностей влияния размерности шин и давления воздуха в шине на величину давления на почву в пределах пятна контакта в соответствии с эксплуатационными и агротехническими требованиями по ограничению воздействия ходовых систем на почву по ГОСТ 26955-86 «Техника сельскохозяйственная мобильная. Нормы воздействия движителей на почву»; теоретическое обоснование и проведение численного эксперимента для установления возможности использования универсальной характеристики тракторных шин при оценке изменения контактного давления пневматического колесного движителя на почву.

Материалы и методы. В исследовании использованы техническая характеристика хлопководческого трактора МТЗ-80Х, положения ГОСТ 7463-2003 «Шины пневматические для тракторов и сельскохозяйственных машин. Технические требования», ГОСТ 26955-86 «Техника сельскохозяйственная мобильная. Нормы воздействия движителей на почву», персональный компьютер с использованием Microsoft Excel 2010, Statistics10.

Результаты обсуждения. Исходя из схемы деформации шины при статических испытаниях (рис. 1), для определения максимального контактного давления необходимо рассмотреть характеристику шины в виде номограммы



Опорные свойства тракторных шин определяют по значениям площади - F пятна контакта, среднего - p_{cp} и максимального давлений на это пятно. При деформации шины под действием нормальной (радиальной) нагрузки - Q образуется пятно контакта площадью - F , на которой создаётся давление на основание. Схема радиальной деформации, форма пятна контакта и эпюра давлений на основание показаны на рисунке.

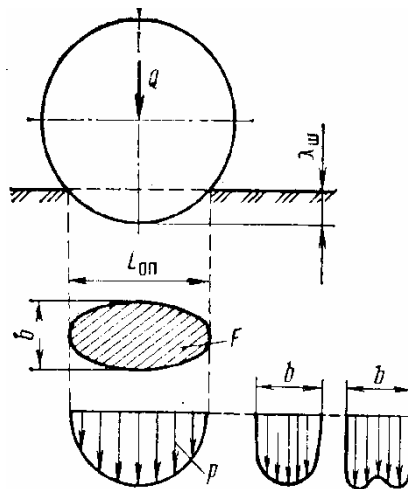


Рис. 1. Схема радиальной деформации и нагружения тракторного колеса

Обычно значение площади - F пятна контакта определяют по наибольшей радиальной деформации шины - $\lambda_{ш}$, называемой нормальной (радиальной) деформацией шины. Для ориентировочной оценки значений площади - F пятна контакта гладкой шины (без цепочной) и нормальной деформации - $\lambda_{ш}$ шины применяют несколько эмпирических формул [4]. Основные из них имеют вид $\lambda_{ш} =$

$$\gamma_{\varepsilon} Q / (\pi p_c \sqrt{Db}); \quad (1)$$

$$\lambda_{ш} \sqrt{Db} = Q c \gamma_{\varepsilon} / p_c \quad (2)$$

где $\lambda_{г}$ - коэффициент, учитывающий твёрдость основания, на которое опирается шина. Обычно $0,7 \leq \gamma_{\varepsilon} \leq 1$; c - коэффициент, прямо пропорциональный ширине - b пятна контакта, давлению p_c воздуха в шинах и обратно пропорциональный нагрузке - Q ; D -свободный диаметр шины.



Значение площади - F контакта зависит главным образом, от нормальной нагрузки на колесо, ширины шины, давления воздуха в ней и твёрдости основания. Высокие почв зацепы уменьшают площадь пятна контакта на твёрдых основаниях. При этом давление по пятну контакта распределяется неравномерно. Обычно у тракторных шин опорная площадь почв зацепов составляет не более 30 % общей площади пятна контакта.

Для характеристики опорных свойств шины иногда используют отношение - $Q / \lambda_{ш}$, называемое радиальной жёсткостью шины.

Формула (2), как указывалось, даёт лишь ориентировочное представление о связи опорных свойств с нагрузкой на шину. Для пневмоколес сельскохозяйственных машин более достоверная формула получена В.В. Смильским [5] на основе обработки опытных данных методами теории подобия и размерностей:

$$Q = (p_c + p_э) z^{0.5} (Db_d / B_{ш}) \lambda_{ш} \sqrt[3]{\lambda_{ш} / H},$$

где p_c – давление воздуха в шине, кПа; $p_э$ – давление, эквивалентное жёсткости каркаса при различной деформации шины, кПа (для тракторных шин при расчётах можно принимать $p_э \approx 110$ кПа); z – число слоёв корда в шине; $D, b_d, B_{ш}, H$ – соответственно свободный диаметр, ширина диска, ширина и высота профиля пневмошины, м; $\lambda_{ш}$ – радиальная деформация шины, м.

Грузоподъёмность шины – это наибольшее допустимое значение нормальной нагрузки - $Q_{дон}$ при которой, несмотря на радиальную деформацию - $\lambda_{ш}$, обеспечивается заданный срок службы шины при заданном значении давления воздуха в ней.

Зависимость площади пятна контакта от нормальной деформации шины в пневматических шинах

1) Теоретический расчёт; 2) Экспериментальный для 9,5-42 Я-183;

3). 13,6 R38ЯР-318; 4). 15,5-38 Я-166; 5). 18,4/15-30 R-319.



Таким образом нами проведённые анализы показывают сопротивление качения, пропорциональные общим потерям на сопротивление качения (скорости трактора, пройденном пути $S \approx 1,5 \alpha$ (α – площадь контакта)), типы шины, давление воздуха шин, значения деформации, боковой силы, по толщине протектора и др. тракторных шин.

Опорные свойства тракторных шин негоризонтальных поверхностей очень разнообразно. Показатели деформирования пневматических шин колеса пропашных хлопковых тракторов или другой сельскохозяйственной машины, должно взаимодействовать с почвой через зону контакта. В результате этого, в пневматических шинах происходят сложные деформации, которые изменяют её первоначальную форму и размеры отдельных элементов. При этом, максимальные деформации соответствуют участкам пневматических шин, находящихся в зоне контакта с почвой, а по мере удаления от контакта деформации пропорционально уменьшаются.

Нагрузка, которую воспринимает пневмошина, -это нормальная нагрузка. При обжатии пневмошины на опорной поверхности с почвой образуется зона контакта усилия, уравнивающая внешнюю нагрузку. Расстояние от оси обжатой пневматической шины до опорной плоскости, называют статическим радиусом шины $r_{ст}$, а разницу между свободным и статическим радиусом нормальным прогибом шины h_z [6].

Наибольшее распространение получила формула Р. Хейдкеля.

$$h_z = G_K / (\pi P_{ш} \sqrt{BD})$$

Этой формулой целесообразно пользоваться в ориентировочных расчётах для давления воздуха не ниже 0,18 МПа (180 кПа) для пневматических шин

Более точна зависимость, предложенная В. Л. Бидерманом.

$$h_z = \frac{C_2 G_K}{2 P_{ш}} + \sqrt{\left(\frac{C_2 G_K}{2 P_{ш}} \right)^2 + C_1 G_K}$$

где C_1 и C_2 - постоянные для данной пневматической шины коэффициенты, определяемые опытным путём по известной методике, эмпирические зависимости для определения данных в [7].



В результате обработки экспериментальных данных статических испытаний пропашных тракторных пневматических шин, получены значения указанных коэффициентов, которые C_2 приведены в рис.3.

Коэффициенты C_1 практически не зависят от модели шины и определяют его лишь по числу слоёв каркаса (чем больше слоёв, тем он меньше).

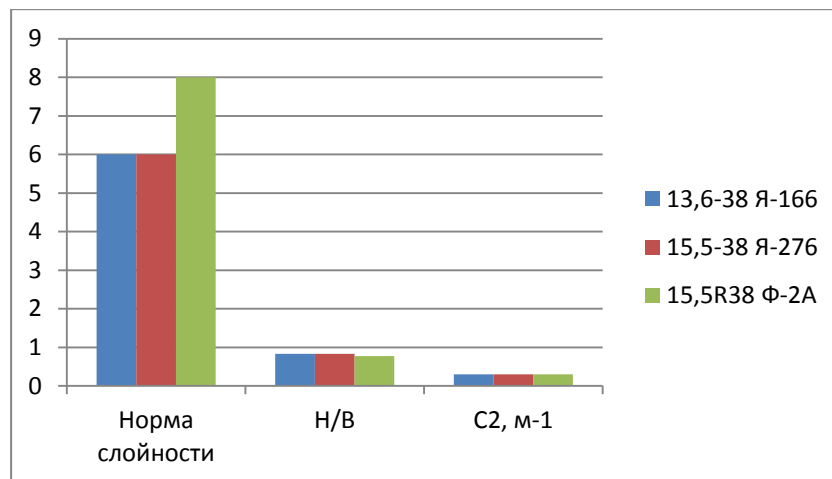


Рис.3. Значение постоянного коэффициента C_2 для тракторных пневматических шин

Для шестислойных тракторных шин диагональной конструкции можно применять коэффициент $C_1 = (0,002-0,003)10^{-5} \text{ м}^2/\text{Н}$. Для пневматических шин модели R коэффициент C_1 несколько больше и составляет $C_1 = (0,004-0,005)10^{-5} \text{ м}^2/\text{Н}$. Для восьмислойных пропашных тракторных пневматических шин $C_1 = (0,0012-0,0028)10^{-5} \text{ м}^2/\text{Н}$.

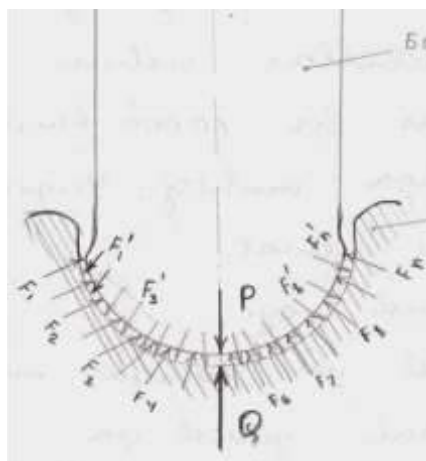


Рис.4. Схема эпюры деформации ведущих тракторных колесных шин



При оценке нормальных деформаций пневматических шин, для которых не приведено экспериментальное определение нагрузочной характеристики, значение коэффициента можно определить известной формулой [8]:

$$C_2 = C_2' \sqrt{\frac{R_K' D'}{R_K D}}$$

где C_2', R_K', D - известные параметры шины, близкой по конструкции к исследуемой шине; R_K и D - радиус кривизны профиля шин величины $2R_K$ приблизительно равен ширине профиля пневматических шин.

На основании зависимостей нормального прогиба от нормальной нагрузки, определяют соответствующие коэффициенты жёсткости, в области рабочих нагрузок, где нагрузочная характеристика практически линейна, а жёсткость показывает, что мало зависит от нагрузки.

Зависимость коэффициента нормальной жёсткости от давления воздуха для пропашных тракторных пневматических шин приведена на рис.5 коэффициент нормальной жёсткости возрастает с увеличением давления воздуха почти пропорционально.

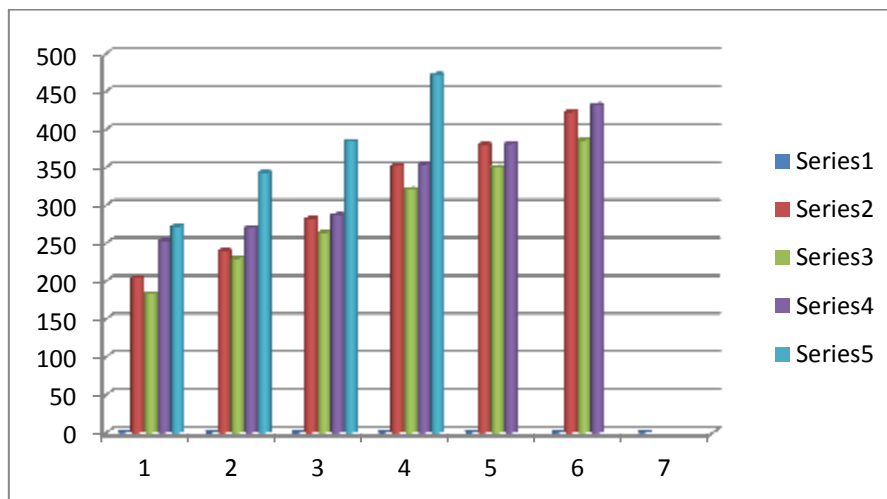


Рис.5. Зависимость коэффициента нормальной жёсткости от давления воздуха для пропашных тракторных шин:

1).9,5–42 Я-183; 2). 13,6/R38 ЯР–318; 3).15,5-38 Я-166; 4).18,4/15-30 R-319.

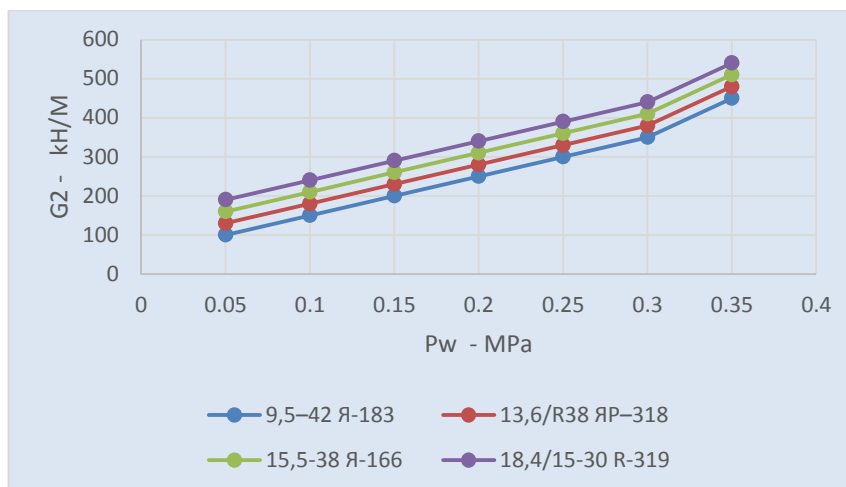


Рис. 5.1. Зависимость коэффициента нормальной жёсткости от давления воздуха для пропашных тракторных шин

п/н	9,5-42 Я-183	13,6/R38 ЯР-318	15,5-38 Я-166	18,4/15-30 R-319
0,75	204	183	253	272
0,10	240	230	270	343
0,15	282	26	287	384
0,20	352	321	354	472
0,25	380	350	381	
0,30	423	386	432	

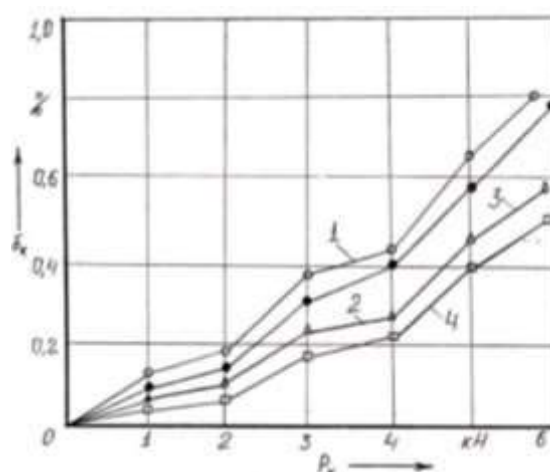


Рис.6. Зависимость бокового перемещения пневматических шин 13,6/R38 ЯР-318 от боковой силы при различной нормальной нагрузке (P = 0,15 МПа):

1). $G_k = 14$ кН; 2). $G_k = 12$ кН; 3). $G_k = 10$ кН; 4). $G_k = 8$ кН.

Экспериментальные значения показаны на графиках 1,2,3,4; ---- значения, рассчитанные по формуле: $h_y = 8,73 - 55,7 p - 0,4 G_k P + 8,2 P_y + 0,16 P_y^2$

Величины h_z и C_z полностью определяют статически обжатую шину. Все другие статические нагрузки прикладываются к обжатой шине, Дополнительно



нагруженные колеса продольной P_x и боковой P_y силами, крутящим M_K , поворачивающим M_{Π} и опрокидывающим M_{OP} моментами вызывают дополнительные деформации шины в направлении действия этих сил: касательную h_x , боковую h_y , крутильную β , поворота θ и наклона j . Если рассматривать действие каждого из этих факторов отдельно, то зависимость между ними и соответствующими деформациями имеет одинаковый характер (рис.6).

Исходя из первичных зависимостей нагружении обжатой силами и моментами, подсчитывают соответствующие коэффициенты жёсткости [5]:

$$C_y = \frac{\partial P_y}{\partial h_y}; C_\beta = \frac{\partial M_K}{\partial \beta}; C_\sigma = \frac{\partial M_n}{\partial \theta}$$

В первом приближении тангенциальная эластичность величины, обратная продольной жёсткости, определяет производную от функции линейного перемещения центра колеса от касательной силы тяги при нагружении его только нормальной нагрузкой. Продольная деформация шины h_x может быть найдена из соотношения

$$h_x = \frac{H - h_z}{\operatorname{tg} \beta} = \frac{H - h_z}{\beta}$$

После преобразования, получим зависимость связывающую коэффициенты тангенциальной λ_τ , нормальной λ_z , и окружной λ_β , эластичностей:

$$\lambda_\tau = \frac{(H/G_K) - \lambda_z}{M_K \varphi \lambda_\beta}$$

где M_K - крутящий момент колеса; φ - коэффициент сцепления шины с опорной поверхностью. От этого выражения легко перейти к соответствующим жёсткостям шины: C_z, C_β, uC_τ .

Деформированная при контакте опорная поверхность ведущего колеса оказывает значительное влияние на тягово-сцепные качества и проходимость трактора [11]. Площадь контакта с почвой тракторных шин, непосредственно связанную с нормальной деформацией, определяют экспериментально на твёрдом основании при



нормальном обжатии пневмошины. В случае эллиптического (или близкого к нему) отпечатка условная площадь контакта будет равна:

$$F_k = \pi a b ,$$

где a и b – большая и малая полуоси эллипса.

Значения a и b ориентировочно можно подсчитать через нормальную деформацию и габариты пневматической шины, используя известные геометрические соотношения круга:

$$a = \sqrt{h_z(D - h_2)} ; \quad b = \sqrt{h_z(B - h_2)} ,$$

В этом случае площадь контакта

$$F_k = \pi h_z \sqrt{(D - h_2)(B - h_2)} , \quad (3).$$

Размер отпечатков пневматических шин, отличающихся от эллипса, определяется планетированием. Этим же методом определяют и действительную площадь контакта F_B шины. При этом определяют также:

Коэффициент формы отпечатка.

$$K_\phi = a/b$$

Коэффициенты насыщенности формы протектора – коэффициент активности колеса.

$$K_u = F_\phi / F_k ,$$

Сравнение результатов расчёта площади контакта нормальной деформации (7) с фактически измеренной по отпечатку пневмошины указывает на их расхождение (Рис. 5). Поэтому в формуле площади контакта, отражающей геометрические соотношения параметров шины, появились различные поправочные коэффициенты.

Длину контакта шины, входящую в математическое описание процесса качения, можно определить приближённо, рассматривая схему колеса, находящегося под действием нормальной нагрузки:

$$2a_{pac} = 2\sqrt{r_c^2 - r_{CT}^2} , \quad (6)$$

Однако, как показал анализ опытных данных, ошибка в таком определении длины контакта составляет в среднем 25-30 % в зависимости от нормальной нагрузки.



Эти ошибки – следствие указанных ранее допущенных при определении F_k . Поэтому при ориентировочных расчётах длины контакта для тракторных шин по указанной формуле целесообразно вводить в правую часть поправочный коэффициент 0,7 в случае условий нагружения шины, соответствующих предельным значениям отношений h_2/H и 0,75 – наоборот.

В этом случае, формула (6) будет иметь вид.

$$2a_{расч} = (0,7...0,75)2\sqrt{r_c^2 - r_{cp}^2}$$

Ошибка при подсчёте длины шин различных моделей по этой зависимости не превышает 10 % для тракторных шин различных моделей и шин прицепов.

Аналогичные подсчёты были выполнены в НПО “НАТИ”, в результате которых получена эмпирическая зависимость.

$$F_R = 4h_2\sqrt{r_c B}, \quad (7)$$

по которой с приемлемой точностью можно вычислить условную площадь контакта шины с твёрдой поверхностью.

В качестве критерия оценки воздействия на почву принимается значение максимального давления в площади контакта движителя.

Допускаемый уровень давления деформирования зависит от почвенно-климатических условий, времени использования техники и её особенностей от параметров шин и режимов их эксплуатации.

Для колесного движителя с пневматическими шинами максимальное давление по ГОСТу определяют из уравнения.

$$q_k = \frac{m_k g}{10^3 F_k} \sum_{i=1}^n K_i,$$

где m_k - масса, создающая статистическую нагрузку на почву единичным колесным движителем, кг; g - ускорение свободного падения, м/с²; F_k - контурная площадь контакта шины на жёстком основании; K_i - коэффициент.

Коэффициенты в этой формуле могут быть сгруппированы в три основные группы:



Зависящие от эксплуатационных факторов ($1 \leq K_1 \leq 1,36$ – от диаметра шины, $1 \leq K_2 \leq 1,5$ – от равномерности распределения давления по длине отпечатка, $1 \leq K_3 \leq 1,2$ – от глубины рисунка протектора); технологические ($0,8 \leq K_7 \leq 1,1$ – от числа проходов).

Требование ГОСТа по соответствию движителя допустимым нормам воздействия соблюдаются, если выполняется условие: $q_K \leq g_{дон}$. В зависимости от влажности почв пределы изменения составляют от 0,8 МПа (влажность менее 0,5 НВ в летне-весенний период).

Выводы

-уменьшение нормальной жёсткости шины данной модели означает увеличение её нормального прогиба, что приводит к снижению срока службы. Установлено, что для обеспечения нормальных условий работы шины нормальный прогиб должен изменяться в определённом диапазоне: $(0,11-0,13) H$ – для шин диаметром менее 1,5 м и $(0,15-0,2) H$ – для шин диаметром более 1,5 м.

-в связи с возрастающей интенсивностью эксплуатации пневматических шин наблюдается тенденция увеличения отношения для улучшения эксплуатационных характеристик шин. Отношение C/B сельхозмашин, находящихся в эксплуатации, составляет $0,10-0,82$.


-обычно у тракторных шин опорная площадь почв зацепов составляет не более 30 % общей площади пятна контакта.

**Список использованной литературы**

1. Годжаев З.А., Измаилов А.Ю., Шевцов В.Г., Лавров А.В., Русанов А.В. Исследование давления колесного движителя на почву с учётом характеристики шины. *Сельскохозяйственные машины и технологии* № 1. 2006. WWW.Vim.ru.
2. ГОСТ 26955-86. Техника сельскохозяйственная мобильная. Нормы воздействия движителей на почву. Дата введения 01.01.1987.
3. Годжаев З.А., Прядкин В.И. Моделирование взаимодействия высокоэластичной шины с неровностью дороги // тракторы и сельхозмашины. -2014. - №1. –С. 16-18.
4. Худайбердиев Т.С., Мелибаев М. Повышение эффективности эксплуатационных и агротехнических показателей машинно-тракторных агрегатов за счёт совершенствования динамических ASCC: 2200. *Impact Factor: Sol 1.1/TAS DOL: 10.15863/TAS International Scientific Journal. Theoretical & Applied Science.p-ISSN:2308-4944 (print). e-ISSN:2409-0085 (online). Year:2020. Issue:03. Volume:83/ Published: 30.03/2020. <http://T--Science.org>.*
5. Melibayev M. Capacity of universal-well-towed-wheel tires. // *Scientific- technical journal of FerPi. ISSN 2181-7200. Vol.2. 2019. Fergana. -p. 144-146.8.* Новиков А.В. Результаты экспериментальных испытаний тракторных шин. БГАТУ. Эксплуатация сельскохозяйственной техники. БГАТУ. Минск. 1997. 315-321 с.
6. Melibayev M., Dadakhodjaev A., Mamadjonov M. Features of the natural-industrial conditions of the zone and operation of machine-tractor units // *ACADEMICIA An International Multidisciplinary Research Journal. ISSN 2249-7137. Vol 9 Issue 3, March 2019. Impact Factor SJIF 2018 = 6.152. India 2019. –p. 37-41. (10.5958 / 2249-7137.2019.00033.8).*
7. Мелибаев М., Дадаходжаев., Рахманов Ш.В. Долговечность и износ тракторных шин. // *ФарПИ Илмий-техника журналы, - Фаргона. 2016. Том 20. -№ 4. -Б. 39-44.*



AUTHORS PROFILE

	<p>Makhmudzhon Melibayev*, Namangan Civil Engineering Institute. Candidate of Technical Sciences Doktor Filosofii (c.t.s.). Namangan, Uzbekistan.</p>
	<p>Anvar Dedokhodzhayev*, Namangan Civil Engineering Institute. Candidate of Agricultural Sciences Doktor Filosofii (c.a.s.). Namangan, Uzbekistan.</p>



USING THE SONG TO LEARN SPANISH

Tuychiyeva M.J.

Samarkand State Institute of Foreign Languages Teacher

Urinbayeva D.

Samarkand State Institute of Foreign Languages Teacher

ANNOTATION

This article is written about how to learn Spanish perfectly with the help of songs. It explains in detail how to choose a song, what exercises to do and what results can be achieved. The article can be useful not only for those who study Spanish, but also for those who want to learn any foreign language.

KEYWORDS: *music, song, listening skills, literature, pronunciation, metaphor, irony, word games*

DISCUSSION

Talking about teaching-learning foreign languages is synonymous with the achievements and frustrations of both the teacher and the student. I personally believe that learning a foreign language is a journey, not just the language itself, but also history, and society, yesterday and today, in short, the soul of culture; and so beyond activities based on homework and class hours, I believe that it is an experience that should leave its mark on the people who live it, whether they are a student or a teacher. For the student, learning a language should be a discovery of the unknown, full of problems and satisfaction. For the teacher teaching it should be an opportunity to convey all your knowledge in a motivating and interesting way thanks to your dedication and enthusiasm.

The main purpose of the article was to find out whether music was used in the ELE classroom in Uzbekistan, as well as to know the teachers' opinion about its use as a teaching tool. Based on the main goal, it was expected that the answer to the following questions: What kind of music is used? Does it meet the tastes of the teacher or the student? What is the purpose of using music in the classroom? Theoretical foundations: Reasons for using music as a teaching tool offers options for teaching grammar and phonetics - by placing songs. In the classroom, the teacher can work on different areas of the language: at the linguistic level, you can practice verb tenses in

context, consolidate previous knowledge, or explain new syntactic structures; similarly, song lyrics stimulate vocabulary growth. On the other hand, when singing, the student practice pronunciation and practice listening to the language being learned in addition to that the songs can be used in everyday speech or in poetry, among other things (Betty, 2004).

It stimulates four skills: speaking of "skills" in the plural, Ruiz emphasizes to Garcia (2005) that songs in the classroom stimulate four skills of the student, and, in the general opinion of many teachers, that music helps" only "listening skills, since the student can "read" the lyrics, "listen" and "talk" about the instructions received, "write" your opinion on the text, etc.

It embodies different literary styles: according to Perez-Agote (1999: 887), "song, like literature, allows us to work on different aspects of language (metaphor, irony, word games, etc.) [...]" (quoted by Ruiz Garcia 2005: Presents authentic texts first-hand: the songs represent real authentic material, as they are written by local singers for the public. In addition, in many cases, the songs are texts that reveal elements of everyday life and use, in most cases, the language of "Simple and informal", they are also short texts with a simple structure that describe a specific topic, making them easy to understand (Ruiz Garcia, 2005). Allows you to express individual emotions and reactions: because



the lyrics are authentic, the themes of the songs reflect the situations in which the student identifies in their culture (novels, family life, social problems, etc.); and so he will interpret in his own way, identifying himself many times with the content expressed in them. Encourages play and creativity: according to Ruiz Garcia, (2005), music makes the student "play" with the language, discovering and experiencing the same thing. Stimulates memory: learns a song and performs it for a long time, even years - an undeniable advantage of using music in the classroom. A voucher to mention, a constant repetition of phrases included in the chorus or chorus of a song. Similarly, Martinez Salles (2002) mentions that on songs can be "catchy", meaning that the rhythm and lyrics remain in the memory of the person who listens to it for an indefinite period of time. Motivation: in the presentation of the book "Good-sounding tasks", the following comment is made: "most experts agree with the recognition that songs are the main motivational resource when it comes to learning a foreign language" (Martinez Sales, 2002: 3).

Teaches cultural, social and historical content: Gil Toresano (2001), States that the class of languages includes the class culture

the country or countries speaking the same language (as cited in Ruiz Garcia, 2005: 7). For his Sylvia Betty notes that "the song is not only a universal language, but also the historical period and society, the expression of which he is" (Betty, 2004: 2).

As you can see, there are many advantages to using songs in the classroom, but this exercise is a challenge for the teacher, as will be seen later in the sequel. There is a problem about the use of music in the classroom. What kind of music should I use? In this sense, there are conflicting opinions. about using only modern, popular, and well-known music; or songs by unknown or not-so-popular artists. These two views illustrate the first hurdle presented to the teacher: choosing the type of music to use in the classroom. However, this may seem like an unimportant detail, but the fact that the teacher will only choose the music of your choice or the music "not fashionable" may affect the effect that the lesson will have in the classroom; because the student may not identify with the selected songs, since they are from the time when the teacher was young; or simply because they are unknown to him.

What topic should I choose? This skin is presented in two versions. First, if a teacher first chooses a topic that they want to discuss in class and then searches for a song that complements it, you will have to face the process of choosing between countless songs dedicated to the same topic. For example, when talking about immigration, you could choose between songs by Manu Chao, Ricardo

Arjon, Juanes, etc. Secondly, if the teacher first chooses a song, he must then choose the topic you want to use, since there can be several topics in a song. For example, the song "Mojado" by Riccardo Ardon not only talks about immigration, but also about romance, family, racism and other topics.

What is the purpose of hosting music? After selecting the type of music, make it available and choose a topic, it's time to develop an action that you want to do with it in class; whether it's a debate or group discussion, grammar or vocabulary, etc. this is a process that the teacher must organize long before reaching the class. Some theorists have criticized the treatment of music in textbooks, including Jimenez and others (1998), who mention the fact that the musical repertoire is not used properly by some publishing houses. It should be understood that the use of music in the classroom requires constant work; the teacher must have time to choose the songs and find out the reasons for this choice. This process requires dedication, and the big question is whether the teacher has time to plan this type of activity, or if its absence means that music is used only as a play activity or just their presence in the classroom. This is invalid.

Review and analysis of the musical repertoire in teaching aids training: to collect data, an Internet survey was conducted, which was taken as a sample of teachers who teach in secondary school classes (junior and senior classes) and adult education institutes. The survey consisted of 28 questions, combined open and closed, in a three-part structure: "teaching activities", "learning resources used in the classroom" and "personal and professional data".

In addition, it was necessary to analyze some training manuals.

mentioned in the survey; the books used by the majority were selected by the faculty. The task was to analyze the musical repertoire, the information provided about the singers, the styles of music, and to see the activities suggested for the use of the songs. In the survey, teachers rated the musical repertoire using the categories "good", "satisfactory" and "bad".

Why do you use music in your Spanish lessons? The following reasons were mentioned: "I found a song that was interesting to listen to it with students, introduce a grammatical theme, and introduce a cultural, historical element, etc." In addition, it was mentioned:

"The song was included in the textbook to dance, sing or play, students ask for it and as a background sound." It can be summarized that the variety of responses received confirms most of the reasons mentioned above to put music in the classroom.



What do you do after you put the songs in class?

The main activity after listening to the songs was re-acquaintance. the dictionary; secondly, the introduction of grammatical elements; and thirdly, the place corresponded to the discussion of the theme of the song. In short, according to the above conclusions, all teachers conduct classes after placing songs in the classroom, especially to consolidate grammar and stimulate the student's skills. The type of music used in their Spanish lessons and the themes of the songs "pop-modern" music was chosen by the majority of the informants 39 out of 41. However, there has been frequent use of folk music, a trend that has been explained in the analysis of the musical repertoire of the manuals, due to the fact that almost all of them include folk or traditional songs, and most teachers use the musical repertoire included in them. Romantic themes are presented to the tastes of 34 teachers, closely followed by traditional and cultural themes. The social theme illustrated the preference of 23 teachers, and the last lines were politics and humor.

Criteria for selecting music for use in the classroom

The order was given by the mayor, the criteria were more important: "improve listening/pronunciation skills; motivate students ... and the teacher; teach grammar; tell something about the culture of the country; learn vocabulary and generate discussions in the classroom." It is interesting to note that many teachers attach great importance to the fact that songs can be used to stimulate the listening and pronunciation skills of the student. This means that all teachers share the age of opium.

This is the best way to get the most out of your music as a didactic hermit.

Personal opinion on the use of music as a didactic tool in language learning The responses were grouped into the following categories: "important, good, useful; motivational factor; helps to diversify learning; very good, but, elements of culture and the use of another meaning in learning". To sum up, there is no doubt that most teachers view the song as a useful, important, and motivating element in the lesson; and it also allows for varying learning. Now, the most interesting point was the one shared by the teachers, who, with rather harsh comments, openly approved of the use of songs in the classroom, but they also stated that it was not an easy job. These opinions were more than interesting, as it is clear that the teacher does not use music in the classroom, even if viewed as a useful tool, as it is a difficult task to plan a class with this type of material.

As for the main purpose of the article, it can be argued that music is indeed used in the ELE

classroom in Uzbekistan; however, the frequency with which it is used suggests that it is not yet given much importance as a learning resource; since, as can be seen from the results, most teachers use songs only a few times per semester. Knowing this situation, you can answer the three questions posed in the goals.

BIBLIOGRAPHY

1. Betti, Silvia (2004): "La canción moderna en la clase de E/LE" en Cuadernos Cervantes de la lengua española, no. 50 http://www.cuadernos cervantes.com/art_50_cancionmoderna.html (21-11- 2006) Jiménez, Juan F.; Martín, Teresa y Puigdevall, Núria (1998): "Sobre el uso didáctico de canciones en clase de español lengua extranjera, con un ejemplo de tipología" en Revista Electrónica ELENET, nr. 3 <http://elenet.org/revista/espanol/lengualextranjera/revista3/Sobre-el-usodid%C3%A1ctico-decanciones-en-clase-de-espa%C3%B1ol-lengualextranjera-con-un-ejemplo-de-tipolog%C3%ADa.asp> (12-09-07) Kunnskaps departamentet, (2007): Språk åpner dører, Strategiplan for styrking av fremmedspråk i grunnsopplæringen 2005-2009 http://udir.no/templates/udir/TM_Artikkel.aspx?id=2953 (13-09-07)
3. Martínez Sallés, Matilde (2002): *Tareas que suenan bien. El uso de canciones en clase de ELE. Bruselas: Consejería de Educación en Bélgica, Países Bajos y Luxemburgo* Ruíz García, Rosario (2005): "De las baúles de la Piquer a las maracas de machín. La canción como contenido cultural en la clase de ele" en REDELE (Red electrónica de la didáctica del español como lengua extranjera). Biblioteca virtual nr. 3 <http://www.mec.es/redele/biblioteca2005/ruiz.shtml> (25-04-2007)



STYLISTIC MEANS IN RUSSIAN AND UZBEK TRANSLATIONS OF THE NOVEL "DON QUIXOTE"

Tursunova Parvina

Samarkand State Institute of Foreign Languages Teacher

Tuychiyeva Maxchexra

Samarkand State Institute of Foreign Languages Teacher

Djalilova Sarvara

Samarkand State Institute of Foreign Languages Teacher

ANNOTATION

The famous Spain writer Servants' creative work was admitted by the readers and specialists in literature of the whole world. Especially his "Don Quixote" is the best known. Several characters in this book, for example Don Quixote, Sancho Ponca are known to a lot of people.

Learning the characters of "Don Quixote" novel how to reconstruct in Uzbek translation version is important and apogee for the literature of Uzbek.

In this scientific research which is called "The usage of the stylistic devices in the translation of the novel "Don Quixote" by Miguel de Servantes into the uzbek and Russian languages". It is paid attention to the reconstruction issues of the portrait and author's speech in the translation version of "Don Quixote" novel.

The aim of the research work is to describe characters created by Servants such as Don Quixote, Sancho Ponca, Dulcinie, to reflect inner world, belief and action of general characters, to show them which were described in translation as an original version by literary comparative analyses.

KEYWORDS: *stylistic means, style, phraseological units, linguistic units, cultural differences, linguistic means, structural features.*

DISCUSSION

In all studies devoted to the style of Cervantes's Don Quixote, we see that special attention was paid to the syncretism or contamination of genre forms peculiar to his genre. In a series of articles on Cervantes's stylistics, "this work, with its structural structures and ideological views, is a contaminated form of the genre of art based on chivalry and word play" (Krzhevsky 1960: 438) or dialogues and novels cases, scenes typical of folk theater, historical narrative, and the poetic genre of sonnet, epitaph, romancero genre are organically mixed. This is what Cervantes researchers call genre syncretism in Don Quixote, a Cervantes-specific axiom (a truth that needs no proof) [11, p. 158]. Such

a stylistic style typical of Cervantes is also described as a metamorphosis or artistic parody of the eternal styles that existed at that time.

In our view, such an innovation of Cervantes can be evaluated not only in terms of a critical assimilation of traditional methods, but also in terms of creating a unique style of language use. Because it was in the time of Cervantes that the language and literary process began to emerge as an important factor in the national self-understanding of the Spaniards. Therefore, the problem of how to speak and how to write began to attract not only apoligets far from philological-political, but also writers. Cervantes also had his own reasons for being interested in this issue. According to Svetlakova,



"there was only one reason for Cervantes to try to return to Spain, and that was the desire of Christians from different countries to write in Spanish, not in primitive Linguo-Franco." [20, p. 158]. We feel Cervantes' desire to strengthen the Spanish language and to create in it in the "Prologue" of Don Quixote's work. The secret stereotyped discussion or parody of literary works raised the author to the level of a master of Spanish word art in this genre. Subsequent research on Cervantes' work has commented that the parody method has become too narrow for his comprehensive work. In fact, the part of the work published as the first work "Exemplary short stories" (chapters 1-1U), completed in 1605, corresponds to the genre of literary parody, which was widely popular at that time [5, p. 245]. In this sense, Don Quixote can be interpreted as a dialogue about literature written in the traditional way that describes the past, or a novel about novels, a novel about Cervantes himself imagined and critically understood, about life today and, finally, the ideal life he dreamed of. It was important to show the role of language as the main tool in writing such a dialogic novel, which allowed it to be expressed in a variety of styles, and its importance in depicting literary fiction and the realities of life.

It was the language of the novel that was created by the author, in the words of MM Bakhtin, "natura non creata quae creat" [4, p. 373]). For example, the protagonist El Ingenioso Hidalgo Don Quijote de la Mancha - the phrase "the noble knight of La Mancha" itself has a title composed of a mixture of absurd and ridiculous meanings that do not suit a noble man. For the word "idalgo" alone gives a clever, cunning, cunning meaning that Don (a conscientious person who is a descendant of a noble generation cannot be called that. If we are talking about a humble and humble "idalgo", why does his name indicate that he belongs to a noble generation? "The word "La Mancha" refers to an abandoned land inhabited by Britons or Gauls, forgotten by the gods and the Empire of Constantinople. At the same time, there are many such words in the novel that do not have the same meaning. For example, Caballero de la Triste Figura - The title of sesor castellano-don quixote, the face of a knight, means "owner of a castle" in the language of knights, "honorable gentleman" in a neutral style, and "experienced swindler" in the slang of thieves.

One of the important contributions of Cervantes to the creation of a new style of work for his time was that he was able to transform the astonishing linguistic means of the Spanish language into words of playful content in various forms; using ambiguity, antithesis, synonymous lines, repetition, ellipsis, etymologically meaningful words, he discovered a new direction in the literature of the

XVII century. Thus Cervantes made extensive use of the ambivalent possibilities of language in the novel to convey the humorous meaning of unity with a sad meaning (el caballero de la triste figura), with nobility-selfishness (sesor castellano), with reality-illusion, with beauty-evil (Aldonsa-Dulcinea). when it is able to harmonize to the extent that it does not, it finds expression in the novel's creation of a unique system of images. Here, in the image of Don Quixote, we see grotesqueness, both a wise man who has lost his mind, and a man of insane stupidity.

En un lugar de la Mancha, de cuyo nombre no quiero acordarme, no ha mucho tiempo que vivia un hidalgo de los de lanza en astillero, adarga antigua, rocín flaco y galgo corredor.

Una olla de algo mas vaca que carnero, salpicon las mas noches, duelos y quebrantos los sabados, lantejas los vienes, algun palomino de acadidura los domingos, consumian las tres partes de su hacienda. Y resto della concluian sayo de velarte, calzas de velludo para las fiestas, con sus pantuflos de lo mesmo, y los dias de entresemana se honraba con su vellorH de lo mas fino. Tenia en su casa una ama que pasaba de los cuarenta, y una sobrina que no llegaba a los veinte, y un mozo de campo y plaza, que asi ensillaba el rocHn como tomaba la podadera. [14, 29 p.].

"In a certain village of Lamanchsky, whose name I have no desire to recall, it was not so long ago that there lived one of those idalgo, whose property is included in a family spear, an ancient shield, a skinny nag and a greyhound dog. Olga more often with beef than with lamb, vinaigrette, which almost always replaced his dinner, scrambled eggs and lard on Saturdays, lentils on Fridays, pigeon, in the form of an additional dish, on Sundays - all this absorbed three-quarters of his income. The rest was spent on semi-kaftan thin cloth, breeches, and the same shoes that made up his festive outfit, and on weekdays he sported in a camisole made of cheap, but very good-quality cloth. turned twenty, and a servant for household chores and field work, who knew how to saddle a horse, and handle garden scissors. [17, 58 p.].

Thus, Cervantes describes his protagonist as a choleric-melancholic type of temperamental, positive-minded person with a conscious attitude to real life. At the beginning of the work, the author moves from the narrow-minded parody style he has followed to the scale of a true novel. In doing so, we feel a mixture of styles typical of epics, short stories, research methods, courtesan novels, and most importantly, new elements specific to the Spanish literary language that Cervantes dreamed of.

In conclusion, the implicit content in the linguistic mechanisms of the Cervantes style is reflected in the innovative style, which was a novelty



for the period he discovered. The stylistic styles used by the author in this context, such as ambivalent phrases, intertextual connections, and authorial irony, had a great positive effect on the work of later writers as linguistic tools skillfully used by Cervantes in XVP century literature.

LIST OF REFERENCES

1. Асорин. Путь Дон Кихота // Асорин (Хосе Мартинес Руис). Избр. произведения. М., 1989;
2. Андреев М.Л. Рыцарский роман в эпоху Возрождения. – М., 1993
3. Державин К.Н. Сервантес: Жизнь и творчество. – М.-Л.: Гослитиздат, 1958. – 740 с
4. Дефурно М. Повседневная жизнь Испании золотого века. – М.: Молодая гвардия, 2004. – 314 с.
5. Диас-Плаха Г. От Сервантеса до наших дней. М., 1981;
6. Зеликов М. В. Набоков и Сервантес. Брахилогическое прочтение «*dielos y quebrantos*» (Don Quijote, I, 1) // Iberica. К 400-летию романа Сервантеса «Дон Кихот» / Отв. ред.: В. Е. Базно, С. И. Пискунова, О. А. Светлакова. СПб.: Наука, 2005. С. 7-10.
7. Зеликов М. В. Испано-баскские параллели в произведениях Сервантеса // Сервантесовские чтения. Л.: Наука, 1988. С. 126–132.
8. Кржевский Б.А. Примечания//М.де Сервантес Сааведра. Назидательные новеллы. – М.; Л., 1934.
9. Кржевский Б. А. Статьи по зарубежной литературе. М.; Л.: Гос. изд. худ. лит., 1960. 438 с.
10. Любимов Н.М. Сервантес — мастер слова // Сервантес и всемирная литература. М., 1969;
11. Любимова. Ч. 1 // Мигель де Сервантес Сааведра. Собрание сочинений: В 5 т. Т. 1. М.: Правда, 1961. 599 с.
12. Любимова Е.Н. Сервантес и Тургенев // Там же; Бэлза С.И. Дон Кихот в русской поэзии // Там же; Alter R. *Partial magic*. California, 1975;
13. Менендис Пидаль Р. К вопросу о творческой разработке «Дон Кихота» //Избранные произведения.М.:Изд иностранной литературы, 1961.
14. Мирюлюбова А. Ю. О стилистической доминанте «Дон Кихота» // Сервантесовские чтения. Л.: Наука, 1985. С. 96–104.
15. Сервантес Сааведра, Мигель де. Хитроумный идальго Дон Кихот Ламанчский / Пер. с исп. Н. Любимова. Ч. 1 // Мигель де Сервантес Сааведра. Собрание сочинений: В 5 т. Т. 1. М.: Правда, 1961. 599 с.
16. Сервантес Сааведра, Мигель де. Хитроумный идальго Дон Кихот Ламанчский / Пер. с исп. Н. Любимова. Ч. 1 // Мигель де Сервантес Сааведра. Собрание сочинений: В 5 т. Т. 1. М.: Правда, 1961. 599 с.
17. Светлакова О. А. «Дон Кихот» Сервантеса: Проблемы поэтики. СПб.: Изд-во С.-Петербург. ун-та, 1996. 108 с.
18. Светлакова О. А. «Дон Кихот» Сервантеса: Проблемы поэтики. СПб.: Изд-во С.-Петербург. ун-та, 1996. 158 с.
19. Степанова Л. Н. «Хитроумный идальго Дон Кихот Ламанчский». Как понимать это заглавие читателю XXI века // Вопросы иберо-романского языкознания: Сб. статей. Вып. 8. М.: Изд-во Моск. унта, 2010. С. 222-228.
20. Тўрабекова С. Тил ва услуб. Т.1963. Лапасов Ж. Бадиий матн ва лисоний таҳлил. Т., 1995.
21. Шалудько И. А.О стилистических особенностях романа Сервантеса «Дон Кихот» 1968. С. 158
22. Юлдашев Б. Стилистический анализ узбекской художественной прозы. Т.1989.
23. Cervantes Saavedra, Miguel de. *El ingenioso hidalgo don Quijote de la Mancha* / Ed. de F. Sevilla Arroyo y A. Rey Hazas. Alcalá de Henares: CEC, 1994. 1080 p.
24. Cervantes Saavedra, Miguel de. *El ingenioso hidalgo don Quijote de la Mancha* / Ed. de F. Sevilla Arroyo y A. Rey Hazas. Alcalá de Henares: CEC, 1994. 1080 p.
25. Cervantes Saavedra, Miguel de. *Novelas ejemplares I* / Ed. de F. Sevilla Arroyo y A. Rey Hazas. Madrid: Espasa Libros, 2010. 360 p.

INTERNET RESOURCES

1. www.spanichliterature/library
2. dic.academic.ru/dic.nsf
3. moscu.cervantes.es
4. az.lib.ru/s/serwantessaawedra



QUALITATIVE ANALYSIS OF PHYTOCHEMICALS IN SELECTED SEAWEEDS OF MANDAPAM COAST, RAMESWARAM, INDIA

Maria Puspham Grace¹, M Rajithra R², V. Ilakkiya³, Dr. B. Dhanalakshmi⁴

¹²³⁴Department of Zoology, Nirmala College for Women, Bharathiyar University, Coimbatore-18

Article DOI: <https://doi.org/10.36713/epra6783>

DOI No: 10.36713/epra6783

ABSTRACT

In the world, seaweeds or marine macro algae area unit is renewable living resources that are used as a several components like food, feed, and fertilizers. They are typically live hooked up to rock or alternative laborious substrata in coastal areas. Turbinaria found in tropical marine waters, which grows on rocky substrates. Turbinaria belongs to the class- Anthozoa, Order-Scleractinia, family-Dendrophylliidae, Genus- Turbinaria. The aim of the present study is the phytochemical analyses were evaluated for the marine algae Turbinaria conoides and Turbinaria ornate from Mandapam coast, Rameswaram, Tamil Nadu, India. To cope with the assessment of the chemical composition of assorted marine seaweeds were extracted from different solvents. The current study reveals that the seaweeds contain a high quantity of phytochemical constituents. Besides, the presence of alkaloids, terpenoids, steroids, tannins, saponins, flavonoids, phenols, coumarins, proteins, carbohydrates, quinones and glycosides from Turbinaria ornata and Turbinaria conoides. This report will lead to the isolation and characterization of these active secondary metabolites for bio-efficacy and bioactivity. Therefore, seaweed extracts possessed higher amount of phytochemicals and which proves that these selected seaweeds will have provide unique and novel metabolites of unprecedented structures, with antibacterial, antifungal, antiviral, anti-plasmodial, nematocidal, anti-inflammatory, anticancer, and anti-angiogenic activities, these bioactive compounds may provide high-quality drug candidates for pharmaceutical applications, as well as agricultural and industrial applications.

KEYWORDS: *Turbinaria, Coumarins, Seaweeds, Phytochemicals and Turbinaria conoides*



INTRODUCTION

India (08.04–37.06 N and 68.07–97.25 E), a tropical South Asian country (Figure 1) has a stretch of about 7500 km coastline, excluding its island territories with 2 million km² Exclusive Economic Zone (EEZ) and nine maritime states. The seaweed flora of India is highly diversified and comprises mostly of tropical species, but boreal, temperate and subtropical elements have also been reported. In all, 271 genera and 1153 species of marine algae, including forms and varieties have been enumerated till date from the Indian waters (Anon, 2005). More than 10,000 species of marine algae have been reported all over the world. In India, about 220 genera and 740 species of marine algae were recorded of which 60 species are of economic value. Tamil Nadu has a geographical extent of 1, 30,058 m². The coast of Tamil Nadu bears luxuriant growth of seaweeds. Several species of green, brown and red algae with luxuriant growth occur along the Southern Tamil Nadu Coast from Rameswaram to Kanyakumari covering 21 islands of Gulf of Mannar. More than two hundred species of seaweeds have found in this area. Rich seaweed beds are present at Mumbai, Ratnagiri, Goa, Karwar, Varkala, Vizhinjam, Visakhapatnam and coastal lakes of Pulicat and Chilka. Seaweeds also occur abundantly in Lakshadweep Andaman and Nicobar Islands (Plate: 1).

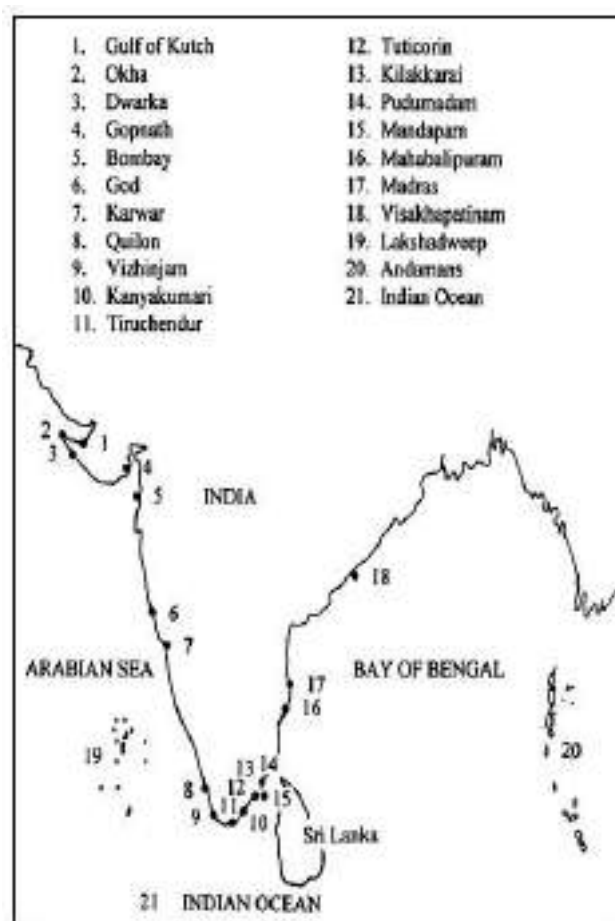


Plate: 1 Biodiversity of seaweed in India

Brown seaweeds are the largest group of marine macroalgal species found in oceans. Gulf of Mannar located in Southeast coast of India is being flourished with brown seaweeds, particularly belonging to the group Fucales (Li *et al.*, 2009; Maria Jose Perez *et al.*, 2016). In the immense coastal areas, they play a major role in maintaining the marine ecosystem. Consumption of brown seaweed is higher than red and green seaweeds and the amount of



seaweed harvesting is increasing every year worldwide (Barsanti & Gualtieri, 2006) mainly for food and for its cell wall polysaccharides. In recent years, pharmacologists have turned their attention secondary metabolites due to its extensive application in the food, cosmetic and pharmaceutical industries and in biotechnology (Wijesekara *et al.*, 2011). Macroalgae, the first marine organisms was explored for medicinal purposes (de Oliveira *et al.*, 2012). Brown algae produce cyclic or acyclic short chain hydrocarbons, terpenoids, acetogenins, polyphenols, and terpenoid-aromatic compounds (Mcclintock & Baker, 2001 and Blunt *et al.*, 2011). The exhibition of antimicrobial activities was considered as an effective indicator of the capacity of the seaweeds to synthesize bioactive secondary metabolites (Del Val *et al.*, 2001). However, seaweeds have been reported to produce a great variety of metabolic compounds, which are not produced by terrestrial plants (Plaza *et al.*, 2008). Seaweeds are known to be rich in proteins, minerals and polysaccharides as well as bioactive substances such as carotenoids, polyphenols, terpenoids, and tocopherols. (Airanthi *et al.*, 2011) documented the presence of carotenoid pigments such as fucoxanthin and astaxanthin. Polyphenols such as phlorotannins were observed in green and brown seaweeds (Yoshie *et al.*, 2002; Sugiura *et al.*, 2006; & Zou *et al.*, 2008).

Today, there is a renewed interest in traditional medicines, remedies with no side effects and an increasing demand for more drugs from marine sources especially seaweeds which provide essential, economic, environmental, aesthetic and cultural benefits to humanity. This revival of interest in marine algal-derived drugs is mainly due to the current widespread belief that “green medicine” is safe and more dependable than the costly synthetic drugs, many of which have adverse side effects. Scientists have even started correlating the properties of seaweeds with their pharmacological activity. In future, more coordinated multidimensional research aimed at correlating marine natural products and phytochemical properties to specific pharmacological activities is expected (Dahanukar *et al.*, 2000) thus, helpful to the rural communities and informal settlements. Several studies are currently being undertaken to isolate the active compound(s) by bioassay-guided fractionation from the algal species that show high biological activity during screening. Thus considering the immense pharmacological properties in marine resource- seaweeds especially of brown marine macro algae an attempt has been made in the present study with an aim to



explore the qualitative phytochemical constituents of *Turbinaria ornate* and *Turbinaria conoides* using different extracts.

MATERIALS AND METHODS

Study area

Rameswaram is a town and a second grade municipality in the Ramanathapuram district in the South Indian state of Tamilnadu. It is island located on Pamban also known as Rameswaram Island, is connected to mainland India by the Pamban Bridge. Rameswaram is considered to be one of the holiest places in India and is the closest point from which to reach Srilankan India (The Hindu,2012).The town covers an area of 53km² (20sq mi) and had a population of 44,856 as of 2011.



Plate: 2 Satellite map showing study area

Sampling sites

Rameswaram has an average elevation of 10m (33ft).The island is spread across an area of 61.8km² (23.9sq mi) and is in the shape of a conch. 74% of the area has sandy soil due to the presence of sea and it has many islands surrounding it, the Palk Strait in the North West and Gulf of mannar in the South East (Ramanathapuram District Administration, 2011). (Plate: 2&3).

Mandapam is a famous tourist attraction in Rameswaram with one of the best beaches. This beach is a calm place with the silent tides.

There is a good water spring situated inside the sea. A Sea Bridge connects Rameswaram on Pamban Island to Mandapam in Tamilnadu.



Plate: 3 Map showing the sample collection area



Collection of macroalgae

Seaweed was collected during the lowest tide of chart datum from the seaweed infested locations along the Southeast coast of India, Rameswaram (9.288°N and 79.313°E) Ramnadu district, Tamilnadu, India. The macroalgae which infested exclusively on the intertidal rocky and other substratum was selected for the collection as to avoid other microalgal contamination. The seaweed samples were collected from spots like Mandapam (Latitude: 9.2770392 and Longitude: 79.1252174) and Pamban bridge (Latitude: 9.2761; Longitude: 79.1867.) of

Rameswaram East coast of Tamilnadu, India. (Plate: 3). The live and healthy macro algal sample was collected by handpicking method at a depth of 1-2m during the month Dec 2020, from sandy beaches and irregularly distributed rocky substratum, of Mandapam beach and Pamban bridge of Rameswaram, Ramnad District, Tamilnadu, India.



Plate: 4 *Collection of Seaweeds from Mandapam beach*

Preservation of seaweeds:

Immediately after collection the surface of seaweed was washed to avoid other algal contamination. They were washed in fresh sea water to eliminate the epiphytes, extraneous matter coarse sand and other calcareous impurities from the Pamban Bridge and Mandapam area of Rameswaram, Ramnadu district Tamilnadu, India. The collected macroalgae samples are transported to the laboratory in polythene bags under ice at 20°C to avoid decomposition and loss of metabolites for identification and future reference.

Identification of macroalgae

The seaweed thus collected was identified with the help of seaweed taxonomist in Centre for Marine Fisheries Research Institute (CMFRI) Mandapam camp Tamilnadu, India (Plates: 5&6)



Scientific classification of identified seaweed

Study Species: I

Domain : Eukaryota

Phylum : Heterokontophyta

Class : Phaeophyceae

Order : Fucales

Family : Sargassaceae

Genus : *Turbinaria*

Species : *Turbinaria ornate* (Turner)



Plate: 5 *Turbinaria ornate*

Common name: Crowded sea bell

Environment: Rocky intertidal areas, reef flats, deep water; mid intertidal to at least 30m

Climate / Range: Tropical and Sub tropical

Distribution: Asia, South America, Africa, Indian Ocean island, china, Pacific island, Singapore, Myanmar, Vietnam, Arabian Gulf, India, Sri Lanka, Coral Sea Islands Territory, Northern Territory, New Guinea, Queensland, Western Australia, Aldabra Islands, Andaman Islands, Archipelago, Christmas Island, Comoros and Mayotte, Diego Garcia Atoll, Laccadive Islands, Maldives, Nicobar Islands, Réunion, Rodrigues Island, Seychelles.

Short description: Thalli erect and tough, dark brown, attached to rocky substrate by coarse branched holdfasts. Alternating turbinate, fleshy leaves with a terete stalk, crowded along the erect axis; distal end of leaves expanded to form a somewhat circular and fleshy marginal blade, outlined by sharp and coarse teeth; centre of blade concave and conspicuously surrounded, partially or fully, by a crown of teeth; single vesicles may be found at the depressed centre, usually among the leaves at the upper portion of the thallus. Receptacular



branches racemose, 5 to 7 mm long, attached to the stalk of the leaves, about 1/3 the distance from the base, their distal portions irregularly forked. Thalli up to 17 cm in height (Plate: 5).

Study Species: II

Domain : Eukaryota

Phylum : Heterokontophyta

Class : Phaeophyceae

Order : Fucales

Family : Sargassaceae

Genus : *Turbinaria*

Species : *Turbinaria conoides* (J. Agardh)

Plate: 6 *Turbinaria conoides*



Common name: Sea bell

Environment: Rocky intertidal areas, reef flats, deep water; mid intertidal to at least 30m

Climate / Range: Tropical and Sub tropical

Distribution: Tropics and subtropics of Indian and Pacific Oceans. China, Japan, Vietnam, Thailand, Malaysia, Singapore, Indonesia, Philippines, Australia, New Zealand, Pacific Islands.

Short description: Thallus erect, coarse, leathery, yellowish brown to dark brown, bushy, forming colonies, 20-30(-50) cm high. Main axes terete, to 3 mm broad, muricate below (because of shed branches). Branching from all sides. Branches 6-9(-20) cm long. Phylloids long-stalked (12-15 mm), turbinate, 10-15 mm long, 10-15 mm broad at distal end. Distal marginal phylloids irregularly triangular, irregularly rounded or lobed, sometimes cut deeply on one side, with single margins bearing sharp teeth; tips flat or concave. The stalk subterete to slightly triangular. Vesicles embedded in center of phylloids. Cryptostomata scattered over phylloids and stalk. Receptacles 3-7 mm long, forked, clustered at the basal portion of the



phyllid stalks. Attachment by discoid holdfast and branched stolons. Growing on rocks, dead corals, in the lower intertidal to the upper subtidal zones, exposed to wave action. (Plate:6)

Preparation of powder

The identified species washed thoroughly with tap water until unwanted impurities, adhering sand particles and extraneous matter like epiphytes, pebbles, surface salty matures shells, were removed and rinsed with sterile distilled water spread on filter paper and left few hours to absorb the excess water and then cut into small pieces, shade dried for two weeks and later the samples were made into coarse powder by grinding them in an lab electric mixer grinder. The powdered sample were then stored in refrigerator. They were then screened for the evaluation of their phytochemical screening and antibacterial activity.

Extraction of shade dried plant material

The secondary metabolites were extracted by using soxhelt apparatus. The algal powder was mixed with different solvents with increasing polarity Chloroform, Ethanol, Methanol, Acetone and Water (1:5 w/v) and placed into a soxhlet apparatus at 50°C for 24hrs the extraction was filtered using whatman No 1 filter paper. After extraction was complete, the solvent was then evaporated under vacuum and then the residue crude obtained was stored in a freezer at -20°C for preliminary phytochemical analysis and antibacterial assay. (Becerro *et al.*, 1988; Murugan and Santhanaramasamy, 2003; Kanjana *et al.*, 2011; Krishnaveni *et al.*, 2012;).

Preparation of seaweed solvents extract on phytochemical screening

The dried, powdered sample was subjected to qualitative test for the amount of phytochemicals present in the collected algal samples for identification of phytochemical constituents according to standard procedures (Lala, 1993).

Phytochemical analysis in different solvent extract

The phytochemical analysis of chloroform, ethanol, methanol, acetone and water extract from selected algae were screened for the presence or absence of active secondary metabolites such as alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines, glycosides and terpenoids. General reaction in these analyses revealed the presence or absence of the compounds in the algal extracts in



following procedures. The phytochemicals of the extracts were determined qualitatively as reported by (Trease and Evans,1989; Sadasivam and Manickam, 1996).

Test for Alkaloids:

1ml of 1% HCl was added to 3ml of extract in a test tube and was treated with few drop of Meyer's reagent. A creamy white precipitate indicted the presence of alkaloids.

Test for Phenols:

Ferric Chloride Test: Extracts were treated with 3-4 drops of ferric chloride solution. Formation of bluish black colour indicates the presence of phenol.

Test for Flavonoids:

A few drops of 1% NH₃ solution was added to the extract in a test tube. A yellow coloration was observed for the presence of flavonoids.

Test for Anthraquinones:

For Anthraquinone identification, 1ml of plant extract few drops of 10% ammonia solution was added, appearance of pink color precipitate indicates the presence of anthraquinones.

Test for Tannins:

To 0.5 ml of extract solution, 1 ml of distilled water and 1-2 drops of ferric chloride solution were added and observed for brownish green or a blue black coloration.

Test for Saponins:

5 ml of extract was shaken vigorously to obtain a stable persistent froth. The frothing was then mixed with 3 drops of olive oil and observed for the formation of emulsion, which indicated the presence of saponins.

**Test for Coumarins:**

For coumarins identification, 1ml of extract, 1ml of 10% NaOH was added. Formation of yellow colour indicates presence of coumarins.

Test for Carbohydrates:

Mix 2ml of plant extract, 1ml of molisch's reagent and few drops of conc. Sulphuric acid were added. Purple or reddish color indicates the presence of carbohydrates.

Test for Proteins:

To 2ml of extract 1ml of 40% NaOH solution and 2 drops of 1% CuSO₄ solution was added. A violet color indicates presence of peptide linkage molecule.

Test for Quinones:

For quinines identification, 1ml of extract, 1ml of concentrated sulphuric acid was added. Formation of red color indicates presence of quinines.

Test for Glycosides:

10ml of 50% H₂SO₄ was added to 1ml of extract in a boiling tube. The mixture was heated in boiling water for 5min. 10ml of Fehling's solution (5ml of each solution A and B) was added and boiled. A brick red precipitate indicated presence of glycosides

Test for Terpenoids:

5 ml of extract was mixed with 2 ml of CHCl₃ in a test tube. 3 ml of concentrated H₂SO₄ was carefully added to the mixture to form a layer. An interface with a reddish brown coloration was formed for the presence of terpenoids

RESULTS AND DISCUSSION

Seaweeds are potential renewable resources in the marine environment. Since ancient times, macroscopic marine algae has been closely associated with human life and has been exhaustively used in numerous ways as a source of food, feed, fertilizer and medicine, and chiefly used for economically important phycocolloids (Levering *et al.*, 1969; Chapman,



1970). Marine algae contain more than 60 trace elements in a concentration much higher than in terrestrial plants.

They also contain protein, iodine, bromine, vitamins and substances of stimulatory and antibiotic nature. The phytochemicals from marine algae are extensively used in various industries such as food, confectionary, textile, pharmaceutical, dairy and paper, mostly as gelling, stabilizing and thickening agents. In addition to vitamins and minerals, seaweeds are also potentially good sources of proteins, polysaccharides and fibres (Lahaye, 1991; Darcy-Vrillon, 1993).

Since there are numerous reports on compounds derived from macro algae with broad ranges of biological activities, such as the antimicrobial, antiviral, anti-tumour, anti-inflammatory, and neurotoxic the present study was performed to investigate the phytochemical constituents of two selected brown seaweeds *Turbinaria ornate* and *Turbinaria conoides* such as alkaloids, flavonoids, steroids, terpenoids and tannins etc. which are presented in Tables (1&2).

I. Qualitative analysis of phytochemical substance screening in seaweed

Turbinaria ornate

In the current study, marine seaweed *Turbinaria ornate* was extracted and screened for bioactive metabolite compounds using various solvents based on polarity. Qualitative analysis showed the presence of major bioactive compounds like alkaloids, phenols, flavanoids, glycosides, lipids, carbohydrates, proteins, tannins, oils, and fats. The marine environment has a great potential for the discovery of lead compounds that could be used against infectious diseases. Table 1 shows that qualitative analysis of phytochemicals of seaweeds powder *Turbinaria ornate* J.Ag. In the phytochemical analysis of *Turbinaria ornata* J. Ag., , twelve different types of secondary metabolites (alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines, glycosides and terpenoids) were tested in five different extracts of *Turbinaria ornata* J.Ag.

Thus out of (12 x 5= 60) tests for the presence or absence of the above compounds, only 26 gave positive results and the remaining 34 gave negative results. The 26 positive results showed the presence of alkaloids, phenol, flavonoids, tannin, saponins, quinines, coumarins, carbohydrates, glycosides and terpenoids. Anthraquinones and proteins did not



show any positive result for their presence in any of the 5 extracts tested from *Turbinaria ornata* J.Ag. coumarins groups showed the maximum presence in the 5 different extracts followed by alkaloids, carbohydrate, quinines, glycosides and terpenoids. Among the 5 different extracts, methanol extract showed the presence of maximum number (10) of compounds. Next to that ethanol 8 compounds and acetone extract showed 6 compounds. Water and chloroform extracts showed 1 compound each (Table: 1)

In the present study methanolic and ethanolic extracts of *Turbinaria ornate* shows the presence of alkaloids, flavonoids, phenol, tannis, saponins, coumarins, carbohydrates, quinines, glycoside and terpenoids. Presence of these secondary metabolites known to be produced by plants and macro algae are of considerable pharmaceutical importance as they show antioxidant activity and their effects on human nutrition and they are used as drugs for the treatment of several diseases known to man and to maintain health (Evans, 2002). These secondary metabolites have been referred to as nature's biological response modifiers because of strong experimental evidence of their inherent ability to modify the body's reaction to allergen, virus and carcinogens.

Table: 1 Phytochemicals screening of different solvent extracted seaweed *Turbinaria ornate*

S.No	Phytochemical	Chloroform	Ethanol	Methanol	Acetone	Water
1	Alkaloids	-	-	+	+	+
2	Phenols	-	+	+	-	-
3	Flavonoids	-	-	+	-	-
4	Anthraquinones	-	-	-	-	-
5	Tannins	-	+	+	-	-
6	Saponins	-	+	+	-	-
7	Coumarins	+	+	+	+	-
8	Carbohydrate	-	+	+	+	-
9	Proteins	-	-	-	-	-
10	Quinines	-	+	+	+	-
11	Glycosides	-	+	+	+	-
12	Terpenoids	-	+	+	+	-

*Abbr: - = Absent, + = Presence



Next to methanol and ethanol, the acetone extract showed the presence six compounds, namely alkaloids, coumarins, carbohydrates, quinines, glycoside and terpenoids. Followed by acetone, chloroform showed the presence of coumarins and aqueous extracts showed the presence of only one compounds namely alkaloids (Table: 1). Presence of these bioactive molecules in various extracts of this seaweed may be responsible for various biological activities (antiviral, anti-inflammatory, and anticoagulant) Cumashi *et al.*, 2007; Ghosh *et al.*, 2009; Pomin and Mourao, 2008.

II. Qualitative analysis of phytochemical substance screening in seaweed

Turbinaria conoides

The important phytochemical viz. alkaloids, glycosides, coumarins, flavanoids, phenols, proteins and free amino acids, quinones, saponins, sterols, terpinoids and sugars were screened for their presence and presented in Table-2.

The presence or absence of the phytochemicals depends upon the solvent medium used for extraction and the physiological aspect of the sea weeds selected. In the present study phenolic compounds were noticed in all the extracts of *Turbinaria conoides*. In general, phenolic compounds possessed specific physical, chemical and biological activities that make them useful as drugs. Phenolics were also responsible for the antimicrobial, anti-inflammatory, anti-feedant, anti-viral, anticancer and vasodilatory actions (Aliyu *et al*, 2009). Saponins are considered as a key ingredient in traditional chinese medicine and are responsible for most of the observed biological effects. Saponins are known to produce effect on inflammation and it is commercially exported as dietary supplements (Manjunatha, 2006).

Table: 2 Phytochemicals screening of different solvent extracted seaweed *Turbinaria conoides*

S.No	Phytochemical	Chloroform	Ethanol	Methanol	Acetone	Water
1	Alkaloids	-	+	+	+	+
2	Phenols	+	+	+	+	-
3	Flavonoids	-	+	+	-	-
4	Anthraquinones	-	+	-	-	-
5	Tannins	-	+	+	-	-



6	Saponins	+	+	+	-	-
7	Coumarins	+	+	+	+	-
8	Carbohydrate	-	+	+	+	-
9	Proteins	-	+	-	-	-
10	Quinines	+	+	+	++	-
11	Glycosides	-	-	+	+	-
12	Terpenoids	+	+	-	+	-

*Abbr: - = Absent, + = Presence,

In the present study Saponins showed its presence in chloroform and ethanol extract. Tannins were found only in the ethanol extract of *T.conoides*. Tannins were used therapeutically as antiviral, antibacterial, antiulcer and antioxidant agents. Many tannin containing drugs are used in the treatment of piles, inflammation, burns and as astringent (Kolodziej *et al.*, 2005). Steroids of plant origin are known to be important for insecticidal, antimicrobial, antiparasitic and cardiotoxic properties. Steroids also play an important role in nutrition, herbal medicine and cosmetics (Okwu, 2001). Coumarins were noticed in chloroform, acetone and ethanol extracts. Coumarins have been used as anti-coagulant to treat lymphedema. The present study confirms the presence of tannins in chloroform and water extracts of Ethanol and Methonal extracts of *Tubinaria ornate* and *Turbinaria conoides* which suggest that it can be used as antimicrobial. Tannins were used therapeutically as antiviral, antibacterial, antiulcer and antioxidant agents. Many tannin containing drugs are used in the treatment of piles, inflammation, burns and as astringent (Kolodzies and Kiderlen, 2005; Rivere *et al.*, 2009). Flavonoids, being the major group of phenolic compound reported for the antimicrobial, antiviral and spasmolytic activity when supplemented in human diet may reduce risk of various cancers, as well as preventing menopausal symptoms. Antitumor and antioxidant properties have been attributed to the flavonoids based on invitro and invivo studies both in human and in animals. (Cody *et al.*, 1998). Phenolics are the largest group of phytochemicals accounting for most of the antioxidant activity of seaweed or seaweed products. According to Aliyu *et al.*, 2009, phenolics were responsible for antimicrobial, anti-inflammatory, antifeedant, antiviral, anticancer and vasodilatory action.



The present phytochemical study revealed the presence of higher concentration of proteins, alkaloids, moderate amount of tannins and traces of cardioglycosides. These constituents significantly contribute to the biological activity of seaweeds (Katayama, 1962, Takagi, 1975). The results obtained in present study are in concordance with (Periasamy Mansuya *et al.*, 2010).

Nowadays, higher percentage of population refers to use remedies of natural origin for curing illness as these claims to produce fewer side effects (Tyagi and Bohra, 2002). Seaweeds, one of the major marine algae provide a rich source of structurally diverse and biologically active secondary metabolites. The functions of these macro algae secondary metabolites are raising defence mechanism against herbivores, fouling organisms and human disease causing pathogens. Research has also shown that marine derived plant can produce a vast array of natural products with great diversity in chemical structure.

CONCLUSIONS

Based on the results obtained from the present study, it can be concluded that the presence of alkaloids, phenolics, flavonoids, saponins, tannins, carbohydrates, carboxylic acid, coumarines, xanthoproteins and anthroquinones from *Turbinaria ornata* and *Turbinaria conoides*. This report will lead to the isolation and characterization of these active secondary metabolites for bioefficacy and bioactivity. Therefore, the exploration of seaweeds using new tools and techniques, such as those of high-throughput genomic and metagenomic approaches, will led to the discovery of more novel bioactive natural products in future, and will help in exploiting their biotechnological potential. The prevention and treatment of these infectious diseases by applying products from marine organisms appears as a possible alternative.

BIBLIOGRAPHY

1. Airanthi M., K. Widjaja-Adhi., Masashi Hosokawa., Kazuo Miyashita. (2011). Comparative antioxidant activity of edible Japanese brown seaweeds. *Journal of Food Science* 76(1):C104-11.
2. Aliyu, A.B., Musa. A.M., Sallau, M.S, and Oyewale, A.O. (2009). Proximate composition, mineral elements and anti-nutritional factors of *Anisopus mannii* N.E.Br. (Asclepiadaceae). *Trends in Applied Sciences Research*. 4(1): 68-72.
3. Anon, (2005). *Seaweeds: Wonder plants of the sea* (Ed. Krishnamurthy, V.), Aquaculture Foundation of India, Chennai, 30
4. Barsanti L and Gualtieri P. (2006). *Algae anatomy, Biochemistry and Biotechnology*. Taylor and Francis.



5. Becerro, M.A., N.I. Lopez, X. Turon and M.J. Uniz, 1988. Antimicrobial activity from marine and freshwater microalgae in laboratory culture. *British Phycological Journal*. 23: 45-47.
6. Blunt JW, Copp BR, Munro MHG, Northcote PT, Prinsep MR. (2011). Marine natural products. *Nat Prod Rep* 28(2):196–268.
7. Chapman V.J. (1970). *Seaweeds and Their Uses*. (second ed.), The Camelot Press Ltd., London and Southampton, pp. 63-85.
8. Cody, V., Middleton, E., Harborne, J.B. and Baretze, A. (1988). *Plant flavonoids in biology and medicine, Biochemical, cellular and medicinal properties*. Alan R. Liss Inc, New York.
9. Cumashi, (2007). A comparative study of the anti-inflammatory, anticoagulant, antiangiogenic, and antiadhesive activities of nine different fucoidans from brown seaweeds, *Consorzio Interuniversitario Nazionale per la Bio-Oncologia (CINBO), Italy*, 541–552.
10. Dahanukar, S.A., Kulkarni R.A. and Rege, N.N. (2000). *Pharmacology of medicinal plants and natural products*. *Indian Journal of Pharmacology*. 32: S81-S118.
11. Darcy-Vrillon B (1993) Nutritional aspects of the developing use of marine macro algae for the human food industry. *International Journal of Food Science and Nutrition* 44: 23– 35.
12. Del Val AG, Platas G, Basilio A, Gorrochategui J, Suai I, Vicente F, Portillo E, Del Rio MJ, Reina GG., Pelaez F. (2001) Screening of antimicrobial activities in red, green and brown macroalgae from Gran Canaria (Canary Islands, Spain). *Int. Microbiol*, 4: 35-40
13. Evans WC (2002). *Trease and Evans Pharmacognosy*, 15th edition. W.B Saunders Company Ltd, London. pp 137-139, 230-240
14. Ghosh, T., Auerochs, S., Saha, S., Ray, B., Marschall, M., (2010). Anti-cytomegalovirus activity of sulfated galactans generated from a commercial preparation of rice bran. *Antiviral Chem. Chemother*. 21: 85–95.
15. Kanjana, K., Radtanatip, T., Asuvapongpatana, S., Withyachumnarnkul, B. and Wongprasert, K. 2011. Solvent extracts of the red seaweed *Gracilaria fisheri* prevent *Vibrio harveyi* infections in the black tiger shrimp *Penaeus monodon*. *Fish and Shellfish Immunology*. 30: 389–396.
16. Katayama, A., (1962). Volatile constituents. In (R. A. Lewin, Ed.) *Physiology and Biochemistry of Algae*, Academic Press, New York, 467-473.
17. Kolodziej, H. and Kiderlen, A.F. (2005). Antileishmanial activity and immune modulatory effects of tannins and related compounds on *Leishmania* parasitised RAW 264.7 cells. *Phytochemistry*. 66(17):2056-2071.
18. Krishnaveni ,K., Mureshkumar, D.J., Balakumaran, M.D., Ramesh, S. and kalaichelvan, P.T. (2012). Production and optimization of extracellular alkaline protease from *Bacillus subtilis* isolated from dairy effluent. *Der Pharmacia Lett*. 4(1)98-109 Lala, P.K. (1993). *Lab manuals of Pharmacognosy*. CSI publishers and distributors, Calcutta.
19. Lahaye, M. (1991). Marine algae as a source of dietary fibers -determination of soluble and insoluble dietary fiber contents in some 'sea vegetable'. *Journal of the Science of Food and Agriculture*. 54:587-594.
20. Lala, P.K. (1993). *Lab manuals of Pharmacognosy*. CSI publishers and distributors, Calcutta.
21. Levering, T. H.A. Hoppe, O.J. Schmid (1969). *Marine Algae. A Survey of Research and Utilization*. *Granm be Gruyter Hamburg*, pp. 1-420
22. Li Y, Qian ZJ, Ryu B, Lee SH, Kim MM, Kim SK. (2009). Chemical components and its antioxidant properties in vitro: an edible marine brown alga, *Ecklonia cava*. *Bio org Med Chem*. 17:1963–1973
23. Manjunatha, B. K. (2006). Antibacterial activity of *Pterocarpus santalinus*. *Indian journal of pharmaceutical sciences*, 68(1): 115.
24. Maria Jose Perez, Elena Falque and Herminia Dominguez. (2016). Antimicrobial Action of Compounds from Marine Seaweed. *Mar. Drugs*, 14(52);1- 38.
25. McClintock, J. B. and B. J. Baker. (2001). *Marine Chemical Ecology. Series in Marine Science, Volume 25*. CRC Press, London, England.



26. Murugan, A. and M. Santhana Ramasamy, 2003. Biofouling deterrent natural product from the ascidian *Distaplia nathensis*. *India Journal of Marine Science*.32: 162-64.
27. Okwu, D.E. (2001). An improving Nutritive value of cassava tapioca meal with local spices. *Journal of Nutraceutical, Functional and medical food*, 3:43-51.
28. Oliveira, A. S. de; Schwambach, T. I.; Sinhorin, A. P, Oliveira, M. R. C. Alessi, K. A. ; Filho, F. A. de O. ; Pina, D. dos S., 2012. Capacity of ensilage of *Jatropha curcas* L. cake to degrade phorbol esters. *Rev. Bras. Zoot.*, 41 (6): 1545-1549.
29. Periasamy Mansuya, Pandurangan Aruna, Sekaran Sridhar, Jebamalai Sureah Kumar and Sarangam Babu, (2010). Antibacterial activity and qualitative phytochemical analysis of selected Seaweeds from Gulf of Mannar region. *Journal of Experimental Sciences*.1(8):23-26.
30. Plaza, M. Amigo-Benavent, M. Del Castillo, M.D. Ibáñez, E. Herrero, M. (2010). Facts about the formation of new antioxidants in natural samples after subcritical water extraction. *Food Res. Int.*, 43: 2341–2348.
31. Pomín, V. H., & Mourão, P. A. S. (2008). Structure, biology, evolution, and medical importance of sulfated fucans and galactans. *Glycobiology*, 18(12):1016-1027.
32. Rivere , C., Van Nguyen, J.H., Pieters, L., Dejaeagher, B., Heyden, Y.V. and Minch, C.V.(2009). Polyphenols isolated from antiradical extracts of *Mallotus metacalfianus*. *Phytochemistry*.70:86-94.
33. Sadasivam ,S. and Manickam, A. (1996). *Biochemical methods for agricultural sciences*, New age International (P) Ltd., New Delhi, India, 1-97.
34. Sugiura, Y., Matsuda, K., Yamada, Y., Nishikawa, M., Shioya, K., Katsuzaki, H., Imai, K.,Amano, H., (2006). Isolation of a new anti-allergic phlorotannin, phlorofucofuroeckol-B, from an edible brown alga, *Eisenia Arborea*. *Biosci. Biotechnol. Biochem.* 70:2807–2811.
35. Takagi. M., (1975). Seaweed as medicine. In: *Advance of Phycology in Japan* (Jan Tokida and Hirose Jena, G. Fisher, Ed.) 321-325.
36. Trease GE, Evans MD. *A text book of Pharmacognosy*, 13th Edn.Baillier, Tindal and Caussel, London.1989, 144-148.
37. Tyagi N, Bohra A. (2002).Screening of phytochemicals of fruit plant and antibacterial potential against *Pseufomonas aeruginosa*. *Biochem Cell Arch.*;2:21-24.
38. Wijesekara, I. Kim, S.K. Li, Y.X. Li, Y.X. (2011). Phlorotannins as bioactive agents from brown algae. *Process Biochem.*, 46: 2219–2224.
39. Yoshie Y, Wang W, Petillo D, Suzuki T. (2000). Distribution of catechins in Japanese seaweeds. *Fish Sci.* 66:998–1000.
40. Zhao, Z.H., Liu, M.J., Tu, P.F., (2008). Characterization of water-soluble poly saccharides from organs of Chinese Jujube (*Ziziphus jujuba* Mill. cv. Dongzao). *Eur. Food Res.Technol.* 226: 985–989.



Qualitative analysis of Phytochemical studies on *Sargassum wightii* and *Padina gymnospora*

Maria Puspham Grace¹, M Rajithra R², V.Ilakkiya³, Dr.B.Dhanalakshmi⁴

¹²³⁴Department of Zoology, Nirmala College for Women, Bharathiyar University, Coimbatore-18

Article DOI: <https://doi.org/10.36713/epra6784>

DOI No: 10.36713/epra6784

ABSTRACT

In recent years, the secondary metabolites are extensively investigated as a supply of healthful agents. The sample for the study constitutes *Sargassum wightii* and *Padina gymnospora* and it was collected from the Mandapam coast, Rameswaram, TamilNadu, India. *Sargassum wightii* is belonging to the family *Sargassum wightii* and *Padina gymnospora* belonging to the family *Dictyotaceae* are 2 brown seaweeds better-known for varied biological activities like bactericide, antiviral, inhibitor, opposed cancer, medicine, etc. Five totally different extracts of *Sargassum wightii* and *Padina gymnospora* were subjected to phytochemical analysis of secondary metabolites of qualitatively phytochemical screening tests of twelve different chemical compounds (alkaloids, terpenoids, steroids, tannins, saponins, flavonoids, phenols, coumarins, proteins, sugars, quinones, and glycosides). Among the solvent extracts of alga *Sargassum wightii* and *Padina gymnospora* showed the utmost presence of saponins, carbohydrates, proteins, and quinines in 3 completely different extracts (ethanol, methanol, water) except solvent and chloroform. So the present study on extractive values of methyl alcohol extract and the binary compound extract was most in each the seaweeds, however, were significantly a lot of in *P. gymnospora* than *S. wightii*. Considering their therapeutic uses, like alternative healthful plants there's a requirement to try pharmacognostic studies of those 2 seaweeds.

KEYWORDS: Seaweeds, Coumarins, Phytochemicals, *Sargassum wightii* and *Padina gymnospora*

INTRODUCTION

Brown seaweed area unit used as animal feed, food ingredients, and fertilizers. They're additionally sensible sources of proteins, carbohydrates, vitamins, and minerals. Food reserves of algae area unit usually complicated polysaccharides and better alcohols. several bioactive metabolites are isolated from algae with totally different medical specialty activities like cytotoxic and antineoplastic, antifungal, antifeedant, inhibitor medicinal drug, antiviral, hepatoprotective, algicidal, anti-diabetic, medicament, nematocidal, etc. (El Gamal AA.,2010). *Sargassum wightii* J. Agardh is one in all the marine macro protist happiness to the category *Phaeophyceae*; it's cosmopolitan in tropical and temperate oceans. It belongs to the marine family *Sargassaceae* and animal order. It's referred to as *Sargassum* or ocean holly.



It's an oversized, affordably vital, and ecologically dominant algae gift in a lot of the tropics. It's the foremost numerous genus among division Phaeophyta in Asian country and is diagrammatical by thirty-eight species.

Another genus *Padina* belongs to the category Phaeophyceae and order dictyotales. *Padina gymnospora* (Kutzing) Sonder belongs to the family Dictyotaceae. Its common name is funnelweed. It's a good vary of bioactive properties like medicament activity (Silva, 2005); haemagglutinating and cytotoxic activity (Joshi et al., 2012); antimicrobial and hemolytic activity (Chander et al., 2014); inhibitor activity (Murugan et al., 2014); Plant growth-promoting impact (Hernández et al., 2016); would heal property (Baliano et al., 2016); synthesis of noble metal nanoparticles (Sri Ramkumar et al., 2017); cytotoxic activity (. Awad et al., 2008 & Jaswir et al., 2011); antimicrobial activity (. Rangaiah et al., 2010) and medicine activity (. El Shoubaky et al., 2014).

Phytochemicals like polyphenols, that area unit broadly speaking showing in plants, area unit found to act as atom scavengers and antimicrobial agents (Gulcin et al., 2002; Oktay et al., 2003). Marine plants contain high amounts of polyphenols and consequently, seaweeds will be used as effective natural antioxidants. Seaweeds area unit utilized for its made nutrient content and inhibitor property in treating major chronic and deficiency diseases. Hence it's vital and necessary to try pharmacognostic studies of marine protocist. There are a unit some reports of the pharmacognostic study of protocist for eg. pharmacognostic and phytochemical investigation of designated marine seaweeds of class Rhodophyceae (. Adikalaraj et al., 2011); pharmacognostic and phytochemical analysis of sargasso wightii from Gulf of Mannar, Mandapam coastal regions Tamilnadu is according by Devi et al., (Devi et al., 2013); whereas pharmacognostic and phytochemical studies of sargasso ilicifolium from Rameshwaram coast, Chennai is according by Sumithra and Arunachalam (Sumithra et al., 2014). We've according to the pharmacognostic study of 2 algae *Chaetomorpha antennina* and *Ulva asterid* dicot genus (. Dhanki et al., 2018)and within the gift work; we have a tendency to report the pharmacognostic study of 2 algae sargasso wightii and *Padina gymnospora*.



MATERIALS AND METHODS

Collection of seaweeds

Seaweed was collected during the lowest tide of chart datum from the seaweed infested locations along the Southeast coast of India, Rameswaram (9.288°N and 79.313°E) Ramnadu district, Tamilnadu, India. The macroalgae which infested exclusively on the intertidal rocky and other substratum was selected for the collection as to avoid other microalgal contamination. The seaweed samples were collected from spots like Mandapam (Latitude: 9.2770392 and Longitude: 79.1252174) and Pamban bridge (Latitude: 9.2761; Longitude: 79.1867.) of Rameswaram East coast of Tamilnadu, India. The live and healthy macro algal sample was collected by handpicking method at a depth of 1-2m during the month Dec 2020, from sandy beaches and irregularly distributed rocky substratum, of Mandapam beach and Pamban bridge of Rameswaram, Ramnad District, Tamilnadu, India.

Preservation of seaweeds:

Immediately after collection the surface of seaweed was washed to avoid other algal contamination. They were washed in fresh sea water to eliminate the epiphytes, extraneous matter coarse sand and other calcareous impurities from the Pamban Bridge and Mandapam area of Rameswaram, Ramnadu district Tamilnadu, India. The collected macroalgae samples are transported to the laboratory in polythene bags under ice at 20°C to avoid decomposition and loss of metabolites for identification and future reference.

Identification of macroalgae

The seaweed thus collected was identified with the help of seaweed taxonomist in Centre for Marine Fisheries Research Institute (CMFRI) Mandapam camp Tamilnadu, India (Plates: 1&2)



Scientific classification of identified seaweed

Study Species: I

Domain : Eukaryota

Phylum : Heterokontophyta

Class : Phaeophyceae

Order : Fucales

Family : Sargassaceae

Genus : *Sargassum*

Species : *Sargassum wightii*(Greville)



Plate: 1 *Sargassum wightii*

Common name: Gulf weed

Environment: Coral reefs, subtidal,

Climate / Range: Tropical

Distribution: Africa, Kenya; Indian Ocean Islands: Andaman Islands, Christmas Island, Indian Ocean, Nicobar Islands, South-west Asia: Bangladesh, India, Sri Lanka; Asia: China, South China Sea; South-east Asia: Malaysia

Short description: The algae are free floating and brown in colour, commonly found in tropical seas. Species of this genus of algae may grow to a length of several metres. They are generally brown or dark green in color and consist of a holdfast, a stipe, and a frond. The plant body is diploid and differentiated into root, stem and leaf-like structures. The leaves are flat, simple structures with distinct midrib and dentate, serrate or entire margins, with an acute apex. It bears long shoots of unlimited growth (primary laterals), leaves (secondary laterals), air bladders and receptacles. Some species have berrylike gas-filled bladders which



help keep the fronds afloat to promote photosynthesis. Many have a rough sticky texture, which together with a robust but flexible body, helps it to withstand strong water currents (Plate: 1).

Study Species: II

Domain : Eukaryota

Phylum : Ochrophyta

Class : Phaeophyceae

Order : Dictyotales

Family : Dictyotaceae

Genus : *Padina*

Species : *Padina gymnospora* (Kutzing)



Plate: 2 *Padina gymnospora*

Common name: Funnel weed

Environment: Sessile; brackish; depth range 0 - 14 m

Climate / Range: Tropical

Distribution: Atlantic Ocean Gulf of Mexico, Caribbean and Bermuda, the Mediterranean (Israel), Canary, Cape Verde and Ascension Island; Indian Ocean, Persian Gulf, Seychelles, Madagascar and Réunion, east to India and south to Western Australia including Bay of Bengal and Andaman Sea; Pacific Ocean: from Korea to the South China Sea south to Queensland, Australia

Short description: Thalli, attached by a small stupose rhizoidal base, are to 6.5 cm high, flabellate and composed of several lobes with in rolled margins. The superior surface (the side toward which the margin is in rolled) is slightly to moderately calcified. Thalli are olive-brown in colour. In transverse section the thallus is composed of 4-6 layers of cells in the mid-regions and up to 8-9 layers near the base. Hair rows are present on both sides of the



thallus, but more conspicuous on the inferior side of the thallus. Tetrasporangia are arranged in concentric lines, above each hair row, mainly (but not exclusively) developed on the superior surface. An evanescent indusium is present but is usually only clearly visible in very young sori. Tetrasporangia are ovoid, up to 100 μm long and 70 μm wide. (Plate: 2).

Preparation of powder

The identified species washed thoroughly with tap water until unwanted impurities, adhering sand particles and extraneous matter like epiphytes, pebbles, surface salty matures shells, were removed and rinsed with sterile distilled water spread on filter paper and left few hours to absorb the excess water and then cut into small pieces, shade dried for two weeks and later the samples were made into coarse powder by grinding them in an lab electric mixer grinder. The powdered sample were then stored in refrigerator. They were then screened for the evaluation of their phytochemical screening and antibacterial activity.

Extraction of shade dried plant material

The secondary metabolites were extracted by using soxhelt apparatus. The algal powder was mixed with different solvents with increasing polarity Chloroform, Ethanol, Methanol, Acetone and Water (1:5 w/v) and placed into a soxhlet apparatus at 50°C for 24hrs the extraction was filtered using whatman No 1 filter paper. After extraction was complete, the solvent was then evaporated under vacuum and then the residue crude obtained was stored in a freezer at -20°C for preliminary phytochemical analysis and antibacterial assay. (Becerro *et al.*, 1988; Murugan and Santhanaramasamy, 2003; Kanjana *et al.*, 2011; Krishnaveni *et al.*, 2012;).

Preparation of seaweed solvents extract on phytochemical screening

The dried, powdered sample was subjected to qualitative test for the amount of phytochemicals present in the collected algal samples for identification of phytochemical constituents according to standard procedures (Lala, 1993).

Phytochemical analysis in different solvent extract

The phytochemical analysis of chloroform, ethanol, methanol, acetone and water extract from selected algae were screened for the presence or absence of active secondary



metabolites such as alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines, glycosides and terpenoids. General reaction in these analyses revealed the presence or absence of the compounds in the algal extracts in following procedures. The phytochemicals of the extracts were determined qualitatively as reported by (Trease and Evans, 1989; Sadasivam and Manickam, 1996).

Test for Alkaloids:

1ml of 1% HCl was added to 3ml of extract in a test tube and was treated with few drop of Meyer's reagent. A creamy white precipitate indicted the presence of alkaloids.

Test for Phenols:

Ferric Chloride Test: Extracts were treated with 3-4 drops of ferric chloride solution. Formation of bluish black colour indicates the presence of phenol.

Test for Flavonoids:

A few drops of 1% NH₃ solution was added to the extract in a test tube. A yellow coloration was observed for the presence of flavonoids.

Test for Anthraquinones:

For Anthraquinone identification, 1ml of plant extract few drops of 10% ammonia solution was added, appearance of pink color precipitate indicates the presence of anthraquinones.

Test for Tannins:

To 0.5 ml of extract solution, 1 ml of distilled water and 1-2 drops of ferric chloride solution were added and observed for brownish green or a blue black coloration.

Test for Saponins:

5 ml of extract was shaken vigorously to obtain a stable persistent froth. The frothing was then mixed with 3 drops of olive oil and observed for the formation of emulsion, which indicated the presence of saponins.

**Test for Coumarins:**

For coumarins identification, 1ml of extract, 1ml of 10% NaOH was added. Formation of yellow colour indicates presence of coumarins.

Test for Carbohydrates:

Mix 2ml of plant extract, 1ml of molisch's reagent and few drops of conc. Sulphuric acid were added. Purple or reddish color indicates the presence of carbohydrates.

Test for Proteins:

To 2ml of extract 1ml of 40% NaOH solution and 2 drops of 1% CuSO₄ solution was added. A violet color indicates presence of peptide linkage molecule.

Test for Quinones:

For quinines identification, 1ml of extract, 1ml of concentrated sulphuric acid was added. Formation of red color indicates presence of quinines.

Test for Glycosides:

10ml of 50% H₂SO₄ was added to 1ml of extract in a boiling tube. The mixture was heated in boiling water for 5min. 10ml of Fehling's solution (5ml of each solution A and B) was added and boiled. A brick red precipitate indicated presence of glycosides.

Test for Terpenoids:

5 ml of extract was mixed with 2 ml of CHCl₃ in a test tube. 3 ml of concentrated H₂SO₄ was carefully added to the mixture to form a layer. An interface with a reddish brown coloration was formed for the presence of terpenoids.

RESULTS AND DISCUSSION**I. Qualitative analysis of phytochemical substance screening in seaweed *Sargassum wightii***

In the present study, the phytochemical screening was performed with chloroform, ethanol, methanol, acetone and water extracts of *Sargassum wightii*. The important



phytochemical viz alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines, glycosides and terpenoids were screened qualitatively for their presence or absence of above compounds in five different above said solvents extracts of seaweed *Sargassum wightii*, and the results were summarized and presented in Table:1

Thus out of (12×5=60) 60 tests for the presence or absence of the above compounds, twenty test gave positive results and the remaining 40 gave negative results (Table:1). The twenty positive results showed the presence of phenols, flavonoids, anthraquinones, tannins, saponins, carbohydrate, proteins and quinines with varied degree. Alkaloids, Coumarins, Glycosides and Terpenoids did not show any positive results for their presence in any of the tested five extracts of *sargassum wightii*. Among the five different extracts tested, acetone extract failed to show the absence of all the compounds except flavonoids. In this preliminary phytochemical analysis methanol and water shows the presence of maximum biochemical compounds. Chloroform and Methanol extracts shows the minimum presence of compounds.

Among the solvent extracts of seaweed *Sargassum wightii* showed the maximum presence of saponins, carbohydrate, proteins and quinines in three different extracts (ethanol, methanol, water) except acetone and chloroform. Chloroform extract showed the presence of three compounds like phenols, tannins and proteins. Next of chloroform acetone showed the presence of only one compound (flavonoids). Among the five different extracts tested methanol and water showed the presence of maximum number (6/12) of compounds. Proteins group showed the maximum presence in four different extract followed by saponins, carbohydrate and quinines. Phenolic group and tannins group showed the maximum presence in two different extracts chloroform and water. Most of the bioactive compounds like flavonoids, anthraquinones, carbohydrate, proteins, and quinines are found whereas compounds like phenols, tannins, saponins are meagrely found and compounds like alkaloids, coumarins, glycosides and terpenoids are not found.

Chloroform extract revealed the presence of phenols, tannins and proteins. Ethanol extract had given positive result for the presence of saponins, carbohydrate, proteins and quinines. Methanol extract had given the positive result for the presence of flavonoids, anthraquinones, saponins, carbohydrate, proteins and quinines. Acetone extract showed the



presence of flavonoids. Water extract showed the presence of phenols, tannins, saponins, carbohydrate, proteins and quinines. (Table: 1) from the above results it is concluded that the presence or absence of the phytochemicals depends upon the solvent medium used for extraction and the physiological aspect of the seaweed selected. The presence or absence of different bioactive chemical constituents in extracts was responsible for different biological activities. The coastal and marine environment offers very rich source of important compounds of structurally novel and biological active metabolites (Anake and Pichan, 2004). *Sargassum wightii* shows a good amount of flavonoids in support of its antioxidant activity; which indicate that this genus is an ideal target for investigating presence of bio-molecules for various medical and industrial applications. In recent years, the secondary metabolites (phytochemicals) of *Sargassum wightii* have been extensively investigated as a source of medicinal agents. These are non-nutritive chemicals like including alkaloids, polypeptides, cyclic peptide, polysaccharide, phlorotannins, diterpenoids, sterols, quinines, lipids and glycerols that have a broad range of biological activities that have protected human from various diseases.

Table: 1 Phytochemicals screening of different solvent extracted seaweed *Sargassum wightii*

S.No	Phytochemical	Chloroform	Ethanol	Methanol	Acetone	Water
1	Alkaloids	-	-	-	-	-
2	Phenols	+	-	-	-	+
3	Flavonoids	-	-	+	+	-
4	Anthraquinones	-	-	+	-	-
5	Tannins	+	-	-	-	+
6	Saponins	-	+	+	-	+
7	Coumarins	-	-	-	-	-
8	Carbohydrate	-	+	+	-	+
9	Proteins	+	+	+	-	+
10	Quinines	-	+	+	-	+
11	Glycosides	-	-	-	-	-
12	Terpenoids	-	-	-	-	-

*Abbr: - = Absent, + = Presence



II. Qualitative analysis of phytochemical substance screening in seaweed

Padina gymnospora

In the present study the phytochemical screening was performed with chloroform, ethanol methanol, acetone and aqueous, extracts of brown marine algae *Padina gymnospora* for the presences and absence of alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines , glycosides and terpenoids . The results were depicted in Table -2.

Out of the sixty tested extracts, forty test showed the presence of alkaloids, phenols, flavonoids, anthraquinones, tannins, saponins, coumarins, carbohydrate, proteins, quinines , glycosides and terpenoids while twenty test showed the absence of flavonoids, anthraquinones, saponins, coumarins, carbohydrate, proteins, quinines , glycosides and terpenoids. Among the secondary metabolites analysed Alkaloid showed its presence in chloroform, ethanol, methanol and its absence in acetone and aqueous extract i.e. water. According to (Eluvakkal *et al.*, 2010)seaweeds which are known as therapeutics, if rich in secondary metabolite like flavonoids and alkaloids are of great healing value and have been broadly used in the drug and pharmaceutical industries.

Table: 2 Phytochemicals screening of different solvent extracted seaweed *Padina gymnospora*

S.No	Phytochemical	Chloroform	Ethanol	Methanol	Acetone	Water
1	Alkaloids	+	+	+	-	-
2	Phenols	+	+	+	+	+
3	Flavonoids	-	+	+	+	+
4	Anthraquinones	-	-	-	+	-
5	Tannins	+	-	+	+	+
6	Saponins	-	+	+	+	+
7	Coumarins	-	+	+	+	+
8	Carbohydrate	-	+	+	+	+
9	Proteins	-	+	+	+	+
10	Quinines	-	-	+	+	+
11	Glycosides	-	+	-	-	-
12	Terpenoids	-	+	+	+	-

*Abbr: (-) - Absent; (+) - Presence,



Phenolics are the largest group of phytochemicals and have been doubted as accounting for most of the antioxidant activity of seaweed or seaweed products. The phytochemical screening of selected seaweed *Padina gymnospora* showed the presence of major secondary metabolite phenol in all the extracts which was similar to the report of (Wang *et al.* 2009) who too found phenols to be plentiful in Icelandic seaweeds. In general, phenolic compounds possess specific physical, chemical and biological activities that make them useful as drugs. Phenolics were also responsible for the antimicrobial, anti-inflammatory, anti-feedant, anti-viral, anticancer and vasodilatory actions.

The results of the qualitative phytochemical screening carried out on various extracts of *Padina gymnospora* showed the presence of flavonoids in ethanol, methanol, acetone and water and absence in chloroform. Flavonoids are the major groups of phenolic compound reports for their antimicrobial, antiviral and spasmolytic activity.

Flavonoids has the ability of scavenging hydroxyl radical, superoxide anion radicals and lipid peroxy radicals highlights many of the flavonoid health promoting function in organisms, which are important for prevention of diseases associated with oxidative damage of membrane, proteins and DNA. Flavonoids in human diet may reduce the risk of various cancer as well as preventing menopausal symptoms (Cushnie and Lamb 2005; De Sousa *et al.*, 2007). The result of phytochemical screening of *Padina gymnospora* showed the presence of Anthraquinones in the ethanol and acetone extracts and absence in chloroform, methanol and aqueous water extracts.

From Table: 2 it is revealed that Tannins, one of the major chemical constituent of the seaweeds are noted to be present in chloroform, ethanol and methanol extracts. Tannins which are of great medicinal values are moderately present in the selected seaweed *Padina gymnospora*. The present study observation states that this seaweed can be extensively used in drug and pharmaceutical industry. Moreover the present study result coincides with the previous observation made by (Eluvakkal *et al.*, 2010. Kolodziej and Kiderlen, 2005) in his study on phytochemical screening stated that tannins in seaweed are found to have antiviral, antibacterial, antiulcer and antioxidant property. Tannins exhibit antiviral, antibacterial and anti-tumor activities. It has also been reported that certain tannins are able to inhibit HIV replication selectively and is also used as a diuretic.



Saponin is used as mild detergents and it is utilized in hyper-cholesterolaemia, hyper-glycaemia, antioxidant, and anti-cancer, anti-inflammatory and anti-fungal properties thereby reducing congestive heart failure, anti-carcinogenic, immune modulatory and cholesterol lowering activity (Sodipo *et al.*, 1991; Oloyede.2005). During the present investigation the phytochemical analysis of *Padina gymnospora* revealed that saponin was present in ethanol, methanol and acetone extracts while they were noted to be absent in extracts of chloroform and water. (Selvi *et al.*, 2014) showed the presents of remarkable amount of Tannin, Phenols and Saponins in the seaweeds of *Sargassum wightii*, *Ulva fasciata* and *Padina gymnospora*. Quinones was absent in the brown seaweed like *P. gymnospora*. The phytochemical screening of the all selected seaweeds showed that the seaweeds contained carbohydrates, protein, gums and mucilage, phenols, starch. The presence or absence of the phyto constituents depends upon the solvent medium used for extraction and the physiological aspect of the sea weeds selected.

CONCLUSION

The seaweeds like other marine organisms are a rich source of secondary metabolites that may be used as drugs as such or they may be starting material for the development of new drugs. Hence it is very important to have quality control parameters for each seaweed. Therefore, results obtained from the present study, it can be concluded that the presence of alkaloids, phenolics, flavonoids, saponins, carbohydrates, coumarines, quines, and tannins from *Sargassum wightii*, *Padina gymnospora* showed a number of active secondary metabolites. In the food, pharmaceutical, cosmetic, cosmeceutical, nutraceutical and biomedicine industries, seaweed/macroalgae are used as a valuable source of bioactive compounds.

REFERENCES

1. Adikalaraj G, Johnson M, Patric RD, Janakiraman N. Pharmacognostical and phytochemical evaluation of selected seaweeds of Rhodophyceae. *Natural Products*. 2011; 7(6):1-9.
2. Anake, K. and Pichan, S. (2004). *Drugs and cosmetics from the sea*. *Marine Drugs*. 73- 82.
3. Awad NE, Selim MA, Metawe HM, Matloub AA. Cytotoxic xenicane diterpenes from the brown alga *Padina pavonia* (L.) Gaill. *Phytotherapy Research*. 2008; 22(12):1610-1613.
4. Baliano AP, Pimentel EF, Buzin AR, Vieira TZ, Romão W, Tose LV *et al.* Brown seaweed *Padina gymnospora* is a prominent natural wound-care product, *Brazilian Journal of Pharmacognosy*. 2016; 26:714-719.
5. Becerro, M.A., N.I. Lopez, X. Turon and M.J. Uniz, 1988. Antimicrobial activity from marine and freshwater microalgae in laboratory culture. *British Phycological Journal*. 23: 45-47.



6. Chander MP, Veeraragavam S, Vijayachari P. Antimicrobial and Hemolytic activity of seaweed *Padina gymnospora* from South Andaman, Andaman and Nicobar Islands of India. *International Journal of Current Microbiology and Applied Sciences*. 2014; 3:364-369.
7. Cushnie, T.P.T. and Lamb, A.J. (2005). Antimicrobial activity of flavonoids. *International Journal of Antimicrobial Agents*.26(5): 343-356.
8. De Sousa, R.R., Queiroz, K.C., Souza, A.C., Gurgueira, S.A., Augusto, A.C. and Miranda, M.A. (2007). Phosphoprotein levels, MAPK activities and NFkappaB expression are affected by fisetin. *Journal of Enzyme Inhibition and Medical Chemistry*. 22 (4): 439-444.
9. Devi JA, Balan GS, Pariyanayagam. Pharmacognostic study and physicochemical evaluation of brown seaweed *Sargassum wightii*. *Journal of Coastal Life Medicine*. 2013; 1(3):199-204.
10. Dhanki A, Pande J, Donga S, Chanda S. Pharmacognostic standardization of *Chaetomorpha antennina* and *Ulva lactuca*, green seaweeds from Gujarat coast. *Journal of Pharmacognosy and Phytochemistry*. 2018; 7(2):3863-3870.
11. El Gamal AA. Biological importance of marine algae. *Saudi Pharmaceutical Journal*. 2010; 18(1):1-25.
12. El Shoubaky GA, Salem EA. Active ingredients fatty acids as antibacterial agent from the brown algae *Padina pavonica* and *Hormophysa triquetra*. *Journal of Coastal Life Medicine*. 2014; 2(7):535-542. <http://dx.doi.org/10.12980/JCLM.2.2014JCLM-2014-0025>.
13. Eluvakkal, T., Sivakumar, S.R. and Arunkumar, K. (2010). Fucooidan in some Indian brown seaweed found along the Coast of Gulf of Mannar. *International Journal of Botany*. 6(2):176-181.
14. Gulcin I, Buyukokuroglu MF, Oktay M, Kufrevioglu IO. (2002). On the in-vitro antioxidant properties of melatonin. *J Pineal Res*, 33: 167-171.
15. Hernández-Herrera RM, Santacruz-Ruvalcaba F, ZañudoHernández J, Hernández-Carmona G. Activity of seaweed extracts and polysaccharide-enriched extracts from *Ulva lactuca* and *Padina gymnospora* as growth promoters of tomato and mung bean plants. *Journal of Applied Phycology*. 2016; 28(4):2549-2560.
16. Jaswir I, Noviendri D, Salleh HM, Taher M, Miyashita K. Isolation of fucoxanthin and fatty acids analysis of *Padina australis* and cytotoxic effect of fucoxanthin on human lung cancer (H1299) cell lines. *African Journal of Biotechnology*. 2011; 10(81):18855-18862.
17. Joshi NVM, Srisudha S. Biochemical characterization, haemagglutinating activity and cytotoxic activity of *Padina gymnospora* (Kützinger) Sonder. *International Journal of Biological and Pharmaceutical Research*. 2012; 3(8):956-961.
18. Kanjana, K., Radtanatip, T., Asuvapongpatana, S., Withyachumnarnkul, B. and Wongprasert, K. 2011. Solvent extracts of the red seaweed *Gracilaria fisheri* prevent *Vibrio harveyi* infections in the black tiger shrimp *Penaeus monodon*. *Fish and Shellfish Immunology*. 30: 389–396.
19. Kolodziej, H. and Kiderlen, A.F. (2005). Antileishmanial activity and immune modulatory effects of tannins and related compounds on *Leishmania* parasitised RAW 264.7 cells. *Phytochemistry*. 66(17):2056-2071.
20. Krishnaveni, K., Mureshkumar, D.J., Balakumaran, M.D., Ramesh, S. and kalaichelvan, P.T. (2012). Production and optimization of extracellular alkaline protease from *Bacillus subtilis* isolated from dairy effluent. *Der Pharmacia Lett*.4(1)98-109 Lala, P.K. (1993). *Lab manuals of Pharmacognosy*. CSI publishers and distributors, Calcutta.
21. Lala, P.K. (1993). *Lab manuals of Pharmacognosy*. CSI publishers and distributors, Calcutta.
22. Murugan K, Iyer VV. Antioxidant activity and gas chromatographic-mass spectrometric analysis of extracts of the marine algae, *Caulerpa peltata* and *Padina gymnospora*. *Indian Journal of Pharmaceutical Sciences*. 2014; 76:548-552.
23. Murugan, A. and M. Santhana Ramasamy, 2003. Biofouling deterrent natural product from the ascidian *Distaplia nathensis*. *India Journal of Marine Science*.32: 162-64.



24. Oktay M, Gulçin I, Kufrevioglu OI. (2003). Determination of in vitro antioxidant activity of fennel (*Foeniculum vulgare*) seed extracts. *Lebensm Wiss Technol*, 36:263-271.
25. Oloyede, O. O. I. (2005). Chemical profile of Unripe Pulp of *Carica Papaya*. *Pak. J. Nutr.* 4(6): 379-381.
26. Rangaiah SG, Lakshmi P, Manjula E. Antimicrobial activity of seaweeds *Gracillaria*, *Padina* and *Sargassum* sp. on clinical and phytopathogens. *International Journal of Chemical and Analytical Science*. 2010; 1(6):114-117.
27. Sadasivam ,S. and Manickam, A. (1996). *Biochemical methods for agricultural sciences*, New age International (P) Ltd., New Delhi, India, 1-97.
28. Selvi, V., Alagesan, P. and Kulandaivel, S. (2014). Study on phyto-chemical and antimicrobial activity of some selected marine seaweeds against human and fish pathogens. *Innovare Journal of Ayurvedic Science*. 2(1): 1-5.
29. Silva TM, Alves LG, De Queiroz KC, Santos MG, Marques CT, Chavante SF et al. Partial characterization and anticoagulant activity of a heterofucan from the brown seaweed *Padina gymnospora*. *Brazilian Journal of Medical and Biological Research*. 2005; 38(4):523-533.
30. Sodipo, O.A., Awanji, M. A., Kolawole, F. B., and Oduntuga, A. A. (1991). Saponin is the active fungal principle in *Garcinia kola*, Hekle seed. *Bioscience Biotechnology Research communications*. (3):171.
31. Sri Ramkumar V, Pugazhendhi A, Prakash S, Ahila NK, Vinoj G, Selvam S et al. Synthesis of platinum nanoparticles using seaweed *Padina gymnospora* and their catalytic activity as PVP/PtNPs nanocomposite towards biological applications. *Biomedicine and Pharmacotherapy*. 2017; 92:479-490.
32. Sumithra M, Arunachalam G. Pharmacognostical study and phytochemical evaluation of *Sargassum ilicifolium* (Turner) C. Agardh. *International Journal of Pharm Tech Research*. 2014; 6(7):2022-2027.
33. Trease GE, Evans MD. *A text book of Pharmacognosy*, 13th Edn. Baillier, Tindal and Caussel, London. 1989, 144-148.
34. Wang, T., Jonsdottir, R. and Olafsdottir, G. (2009). Total phenolic compounds, radical scavenging and metal chelation of extracts from Icelandic seaweeds. *Food chemistry*. 116:240-248.



VOLLEYBALL PLAYERS' SKILL OUTPUT IN RESPONSE TO PLYOMETRIC TRAINING

S. Senthil Kumaran¹, P. Jenith², A. Abdul Halik³, N. Kodeeswaran⁴

¹ Director, Unicorn Fitness, Madurai, Tamilnadu, India.

^{2,3,4} PhD, Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu.

ABSTRACT

The reasoning of this examination was to investigate the volleyball players' skill output in response to plyometric training. To accomplish this reason for the investigation thirty school level young men volleyball players were chosen from St. Britto Hr. Sec. School, Madurai, Tamilnadu, India were randomly chosen as subjects. Their age ran in the middle of 13 and 16 years. The subjects were isolated into two groups specifically plyometric group and control group. The plyometric group was exposed to plyometric preparing (for week by week three days monday, wednesday, friday) at evening meeting for about six weeks. Spiking, Service and Passing was chosen as reliant variable. After the assortment of fitting information, it was genuinely examined by utilizing paired't' test. The degree of importance was set at 0.05. The consequence of the current examination showed that the plyometric preparing has huge enhancement for spiking, administration and passing capacity of volleyball players.

KEYWORDS: *Plyometric Training, Skill Performance Variables, Volleyball Players.*

INTRODUCTION

Plyometric (otherwise called "ploys") is a sort of activity preparing intended to deliver quick, incredible developments, and improve the elements of the sensory system, by and large to improve execution in sports. Plyometric developments, in which a muscle is stacked and afterward contracted in quick arrangement, utilize the strength, flexibility and innervations of muscle and encompassing tissues to 23 bounce higher, run quicker, toss further, or hit more enthusiastically, contingent upon the ideal preparing objective. Plyometric is utilized to speed up or power of solid constrictions, giving touchiness to an assortment of game explicit exercises. Plyometric has been appeared across the writing to be useful to an assortment of competitors. Advantages range from injury anticipation, power improvement and run execution among others. Plyometric practice alludes to those exercises that empower a muscle to arrive at maximal power in the briefest conceivable time. "Plyometric" is a mix of Greek words that in a real sense intends to expand estimation plyometric practice is a speedy, incredible development utilizing a pre-stretch or counter development, which includes the stretch-shortening cycle (SSC). The reason for plyometric practice is to build the force of resulting

developments by utilizing both the normal flexible parts of muscle and ligament and the stretch reflex. To successfully utilize plyometric as a feature of a preparation program, it is essential to get: (1) the mechanics and physiology of plyometric work out, (2) standards of plyometric program plan and (3) strategies for securely and adequately performing explicit plyometric works out. Plyometric include power hopping, dull jumping and fast power creation. At the point when your muscles unpredictably contract, or abbreviate, at that point quickly extend and protract, they produce maximal force ideal for athletic circumstances. It is a quick development that occurs over a brief period. Plyometric are ideal for competitors or individuals hoping to improve strong force, speed and strength (Baechle, 2008).

Volleyball is a group activity where two groups of six players are isolated by a net. Each group attempts to score focuses by establishing a ball in the other group's court under coordinated guidelines. It has been a piece of the authority program of the Summer Olympic Games since 1964. The total standards are broad. Be that as it may, just, play continues as follows: a player in one of the groups starts a 'rally' by serving the ball (throwing or delivering it and afterward hitting it with a hand or



arm), from behind the back limit line of the court, over the net, and into the accepting group's court. As volleyball match-up includes a greater amount of expertise execution. Which construct the parts for the game, as an exploration researcher extraordinary arranged plyometric preparing program for the school level young men volleyball players (Holyoke, 1985).

METHODOLOGY

The reasoning of this examination was to investigate the volleyball players' skill output in response to plyometric training. To accomplish this reason for the investigation thirty school level young

men volleyball players were chosen from St.Britto Hr. Sec. School, Madurai, Tamilnadu, India were randomly chosen as subjects. Their age ran in the middle of 13 and 16 years. The subjects were isolated into two groups specifically plyometric group and control group. The plyometric group was exposed to plyometric preparing (for week by week three days monday, wednesday, friday) at evening meeting for about six weeks. Spiking, Service and Passing was chosen as reliant variable. After the assortment of fitting information, it was genuinely examined by utilizing paired't' test. The degree of importance was set at 0.05.

Table-I
Criterion Measures
Skill Performance Variables

Variables	Test Items	Unit of Measurement
Spiking	Helman Volleyball Test (Wall Spike Test)	Points
Service	Russell Lange Volleyball Test (Serving Test)	Points
Passing	Helman Volleyball Test (Wall Pass Test)	Points

TRAINING PROTOCOL

For plyometric group went through their preparation program as three days out of each week for about six weeks. Preparing was given in the evening meeting. The instructional course incorporates warm up and cool down. Consistently the exercise went on for 45 to an hour roughly. The

subjects went through their preparation programs according to the time tables; for example, side to side lower leg bounces, twofold leg jumps, split hops, sidelong cone jumps and single leg bouncing under the severe management of the examiner. During test period control bunch didn't take an interest in any of the unique preparing.

RESULTS

Table-II
Comparison of Mean, and't'-Values of Skill Performance Variables between
Pre & Post Test among Plyometric and Control Groups

S. No	Performance variables	Groups	Test	Mean	't' Values
1.	Spiking	Plyometric group	Pre Test	21.86	10.42*
			Post Test	25.60	
		Control group	Pre Test	19.13	1.32
			Post Test	21.26	
2.	Service	Plyometric group	Pre Test	31.60	13.46*
			Post Test	39.53	
		Control group	Pre Test	30.46	0.18
			Post Test	30.53	
3.	Passing	Plyometric group	Pre Test	20.73	11.21*
			Post Test	25.06	
		Control group	Pre Test	19.53	0.64
			Post Test	19.33	

*Significant at 0.05 level of confidence



Table-II reveals that the obtained mean values of pre test and post test of plyometric group for spiking, service and passing were 21.86 and 25.60, 31.60 and 39.53, 20.73 and 25.06 respectively; the obtained 't' ratio were 10.42*, 13.46* and 11.21* respectively. The tabulated 't' value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was greater than the table value. It is found to be significant change in spiking, service and passing of the volleyball players. The obtained mean values of pre test and post test scores of control

group were 19.13 and 21.26, 30.46 and 30.53, 19.53 and 19.33 respectively, the obtained 't' ratio was 1.32, 0.18 and 0.64. The required table value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was lesser than the table value. It is found to be insignificant changes in spiking, service and passing of the volleyball players. The mean values of skill performance variables among plyometric group and control group are graphically represented in figure-1.

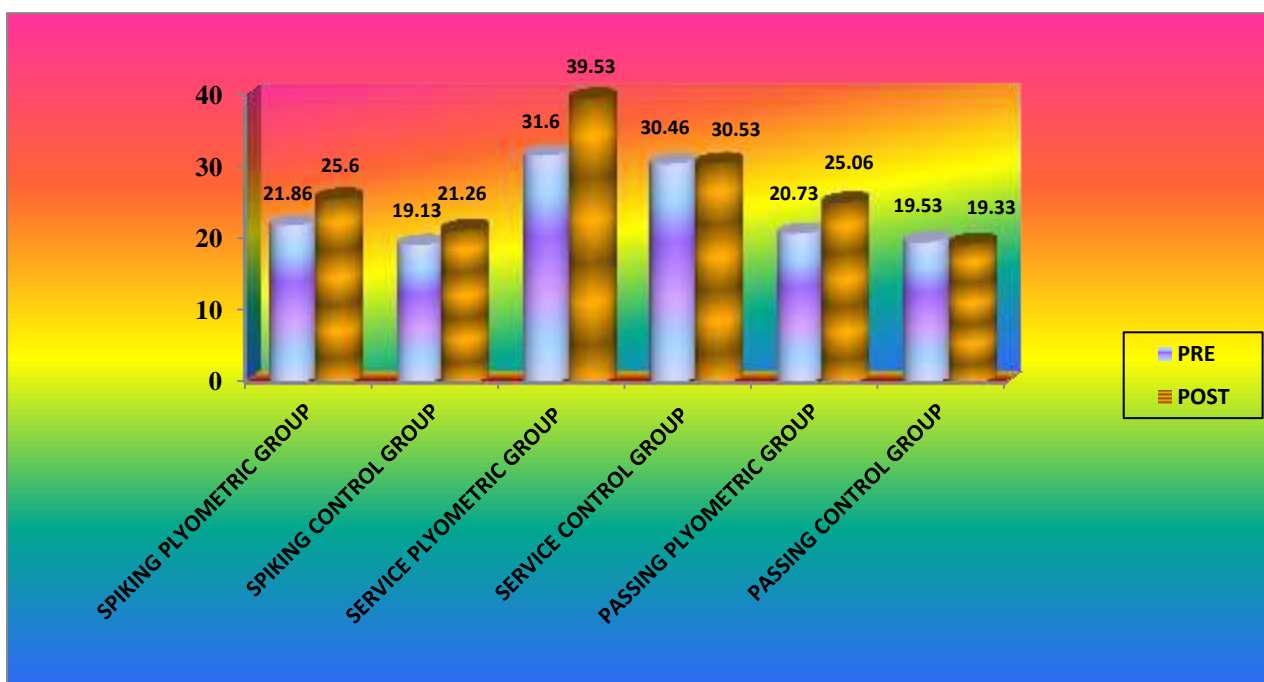


Figure-1: Bar Diagram Showing the Pre Test and Post Test on Skill Performance Variables of Plyometric and Control Groups

DISCUSSION ON FINDINGS

The results of the study indicated that the skill performances variables such as spiking, passing and service were improved significantly after undergoing plyometric training. The changes in the selected parameters were attributed the proper planning, preparation and execution of the training package given to the players. The findings of the present study had similarity with the findings of Annadurai (2014), S Senthil kumaran (2018), Veeramani (2015), The results of the present study indicates that the plyometric training methods is appropriate protocol to improve spiking, passing and service of school level boys volleyball players. From the result of the present study it is very clear that the skill performances variables such as spiking, passing and service improvement significantly due to plyometric training.

CONCLUSION

Based on the findings and within the limitation of the study

1. It was noticed that practice of plyometric training helped to improve skill performance variables of school level boys volleyball players.
2. It was also seen that there is progressive improvement in the selected criterion variables of experimental group of school level boys volleyball players after six weeks of plyometric training programme.
3. Further, it also helps to improve skill performance variables spiking, service and passing.



REFERENCES

1. S Senthil Kumaran. *Impacts of plyometric training on selected physical fitness variables among basketball players, International Journal of Yoga, Physiotherapy and Physical Education.* 2018; 3(4): 52-54.
2. Annadurai R (2014) *Effect of swiss ball and plyometric training programme on selected physical variables and skill performance of inter collegiate men volleyball players. Academic Sports Scholar, Volume. 3, Issue. 5.*
3. D.Bala Krishna (2016), *Effects of skill training and plyometric training on selected skill performance variable (service) among school volleyball players International Journal of Physical Education, Sports and Health Vol. 3 Issue 2, Part D.*
4. P.Selvakumar and Dr. G Palanisamy (2017), *Effect of strength and plyometric training on selected skill performance variables of male volleyball players International Journal of Physical Education, Sports and Health, Vol. 4 Issue 3, Part B.*
5. R.Varathan (2018), *Effect of plyometric training on speed, speed endurance and agility of sedentary college men. International Journal of Physical Education, Sports and Health, Vol. 5 Issue 2, Part B.*
6. Veeramani (2015) *Effect on package of low impact plyometric exercise on selected performance related fitness variables among volleyball players. International Journal of Physical Education, Volume. 2(1), pp. 20-22.*
7. Vladan et al., (2008) *The Effect of plyometric training on the explosive strength of leg muscles of volleyball players on single foot and two-foot takeoff jumps series. Physical Education and Sport, Volume. 6, pp. 169 -179.*



INTERACTIVE METHODS TEACHING THE RUSSIAN LANGUAGE IN A NON-LANGUAGE UNIVERSITY

Abdusalamova Fatima Abdugafurovna¹, Khashimova Feruza Uralovna².

^{1&2}Teachers of the interfaculty department of Russian language of the National University of Uzbekistan named after Mirza Ulugbek.

ANNOTATION

Interactive methods are used in teaching foreign language. In this process, the suggestive method has become particularly effective. The use of optimal means during classroom work creates opportunities for intensive mastering of speech in communicative communication, motivates the learning process.

KEY WORDS: *Russian language, methodology, intensive training, efficiency, speech.*

ИНТЕРАКТИВНЫЕ МЕТОДЫ ПРЕПОДАВАНИЕ РУССКОГО ЯЗЫКА В НЕЯЗЫКОВОМ ВУЗЕ

**Абдусаламова Фатима Абдугафуровна,
Хашимова Феруза Ураловна.**

Преподаватели межфакультетской кафедры русского языка Национального университета Узбекистана имени Мирза Улугбека.

Аннотация

В обучении иноязычной речи используются интерактивные методы. В этом процессе суггестологический метод приобрел особую эффективность. Использование оптимальных средств во время аудиторной работы создает возможности для интенсивного усвоения речи в коммуникативном общении, мотивирует процесс обучения.

Ключевые слова: *русский язык, методика, интенсивное обучение, эффективность, речь.*

Важнейшей задачей обучения русскому языку в национальных группах вуза является развитие связной речи студентов, что обусловлено принципом коммуникативной направленности обучения. Решение коммуникативных задач должно привести к тому,

чтобы будущие специалисты имели языковые навыки и умения.

Традиционная методика обучения второму языку к успеху не приводит. Нужно совершенствовать методику преподавания, программы обучения. При разработке методики и при обучении нужно учитывать и



принципиальные отличия русского и узбекского языка, и, вместе с тем, необходимо изучать русский язык с опорой на родной язык. Значит, при изучении второго языка важна коммуникативная среда. В узбекском же кишлаке, где нет ни одного русского, трудность составляет отсутствие языковой среды и потребности у молодёжи говорить на русском языке. Наши студенты прекрасно понимают русскую речь, с которой сталкиваются ежедневно, смотря телевизор, слушая радио, читая книги, но им трудно дается спонтанная речь на русском. Уроков русского языка явно не хватает для приобретения речевых навыков, ведь в вузах остальные предметы ведутся на узбекском языке. В настоящее время, когда происходят коренные изменения в обучении, когда кардинальным образом пересматриваются содержание и методы обучения, целесообразно вернуться к рассмотрению истории методики преподавания русского языка как иностранного и основных тенденций её развития.

Методика обучения русскому языку как неродному в новых геополитических условиях только формируется, базируясь на наработках теории обучения (и воспитания) русскому языку как иностранному, русскому языку в национальных группах. Опыт должен показать в ближайшее время преемственность и взаимодополняемость этих теорий и методик. Понятно, что базовый принцип обучения русскому языку как неродному остается: учет особенностей родного языка и родной культуры в учебном процессе необходим так же, как и сохранение базовых ментальных исторических связей личности с истоками своей нации через национальный (родной) язык и культуру.

Современную методику преподавания русского языка как иностранного характеризует акселерация, т.е. ускорение темпов обучения, стремление к большой оптимизации, интенсификации учебного процесса. Для более совершенного практического овладения иностранным языком необходимо в известных пределах понимать устную и письменную речь на данном языке и уметь выражать свои мнения на нем. Из этого следует простой вывод, что в типичном случае предметом обучения должен быть не русский язык вообще, а речь на русском языке, процессы порождения речи. Различие между языком и речью с наибольшей очевидностью выступает как раз при обучении языку, в процессе чего, с одной стороны, изучается язык, т.е. происходит овладение теорией языка, с другой - научение речи, т.е. научение говорению, слушанию, чтению и письму. В результате изучения языка

приобретаются знания, в результате практики - умения и навыки.

Интенсивное обучение воспринимается как специфическая система обучения. В ее рамках разработаны новые принципы отбора и организации речевого и языкового материала, из которых ведущими являются деятельностный, личностно-ролевой, ситуатив-но-тематический. Создана новая динамическая модель обучения и управления коммуникативно-учебной деятельностью обучаемых. Умение общаться на иностранном языке представляет собой моделирование ими в речевой практике процессов порождения, смыслового восприятия и коммуникативного взаимодействия речевых высказываний и формирование соответствующих механизмов. Особое значение приобретают овладение обучаемыми психотехникой речевого общения и достижение в обучении ряда педагогических целей.

Интенсивное обучение иностранному языку, основываясь на деятельностном и коммуникативно-личностном подходах, рассматривает практик) иноязычного общения с социально-психологических позиций. Это особым образом организованное обучающее общение, в ходе которого происходит ускоренное познавательное обогащение и активное творческое развитие личности при помощи системы управляемых групповых взаимодействий.

Методы интерактивного обучения осмысливаются как оптимальная реализация некоторых прогрессивных тенденций в общей педагогике и психологии, в частности в контексте проблем воспитывающей роли процессов обучения. Здесь главной целью обучения выдвинуто овладение учащимися иноязычной речью.

Как трактует доктор педагогических наук, профессор Г.А. Китайгородская, цель интенсивного обучения русского как иностранного - в кратчайший срок приобрести умения иноязычного общения. Она считает, что содержание интенсивного обучения - приобретение комплекса навыков и умений, достаточных и необходимых для эффективной деятельности в конкретной области, а также овладение языковым материалом, обесценивающим формирование, развитие и использование этих навыков и умений. Интенсивное обучение выступает в своей воспитывающей функции. [1]

Г.А. Китайгородская основывается на теории доктора медицинских наук, болгарского ученого Г. Лозанова, определяющего значение понятия «суггестология» как «науки об освобождении скрытых возможностей человека».



Эффективность суггестопедического метода состоит в усвоении большого количества речевых единиц; в выработке способности учащихся активно использовать «языковой запас»; в общении на иностранном языке; в понимании иностранной речи; в умении гибко варьировать такое общение, переносить усвоенные речевые единицы в другие ситуации; в создании чрезвычайной мощной мотивации обучения; в снятии психологических барьеров (стеснения, страха, скованности).

Исходя из этого, мы считаем, что реализацию установки на раскрытие резервов личности учащегося обеспечивают такие условия, как:

- авторитет преподавателя и его творческая роль;

- создание доверительных отношений в группе и преподавателя с группой;

- высокий эмоциональный тонус аудитории и эмоциональная включенность в учебный процесс;

- высокомотивированная учебная деятельность, направленная на содержание обучения;

- деятельностный подход к усвоению русского как иностранного.

В условиях интенсивности имеет место интерактивное обучение, при котором обучаемые могут использовать свой потенциал для осуществления реальной коммуникации. Речь идет в первую очередь о том, чтобы раскрыть и развить способности, навыки, отношения и взгляды, которые необходимы для осуществления намеченной цели.

Студентам предлагают такие формы активности, которые заставляют их применять русский язык и таким образом усваивать его. Студенты становятся авторами своих высказываний, они скорее могут усвоить этот язык, поскольку сами определяют, что хотят выразить. Студенты учатся слушать самих себя в процессе говорения. Они не только выражают свои мысли, но и развивают их дальше и понимают лучше, когда их проговаривают. В процессе говорения они обнаруживают мысли, которые в себе первоначально и не предполагали.

Интерактивное обучение учитывает психологию человеческих взаимоотношений. Здесь центральной фигурой является группа студентов, которые совместно ищут решение общей задачи, активно воздействуют друг с другом и с преподавателем, имеют возможность делиться своими переживаниями.

В быстром овладении иноязычной речью существенное место занимает инсценирование предложенных автором учебника диалогов и искусственных ситуаций,

разыгрываемые на занятиях, повторяются и разыгрываются вживую за пределами аудитории, таким образом, происходит естественное закрепление приобретенных речевых моделей.

Начальный этап в обучении русскому языку как иностранному имеет свою специфику, которая определяется характером минимизации языкового материала, его объемом, достаточным для восприятия, воспроизведения и свободного продуцирования учащимися, методами и приемами его введения и закрепления. Поэтому учебнику в интерактивном обучении принадлежит одно из главных мест. Для начального этапа они должны в лингвистическом плане представлять модель русского языка в наиболее простой, но строго нормативной форме, составляющей ядро русской речевой системы. Такая модель должна научить иностранцев механизму порождения речи на русском языке для нужд элементарного общения. Само понятие коммуникативной значимости не может быть определено без создания соответствующего словаря элементарных тем и ситуаций общения, в которых преимущественно употребляются данные единицы.

Представление о современном учебнике включает, с одной стороны, моделирование основных моментов учебного процесса, с другой стороны - моделирование речевой деятельности, осуществляемой в пределах предлагаемого учебником микроязыка. Конкретная ориентированность учебника предполагает в первую очередь выделение тех видов речевой деятельности, которые подлежат усвоению, и определенного уровня владения языком, который должен быть достигнут по каждому из этих видов.

Моделирование речевой деятельности может быть конкретизировано как моделирование речевой деятельности по ее основным видам (слушание, говорение, чтение, письмо) в пропорции, необходимой для реализации конкретных целей.

Как показывают основные положения гуманистической психологии зарубежных ученых К.Роджерса, Ф.Перлза и др., к методам интерактивного обучения обычно относят дискуссию, эвристическую беседу, «мозговую атаку», деловую игру, ролевую игру и т.д. Выбор того или иного метода обучения определяется исходя из учебных задач, опасений и ожиданий группы степени владения преподавателем той или иной методикой, контекста ситуации. Безусловно, использование данных методов в процессе обучения предполагает взаимоопосредованную активность преподавателя и учащихся. [2]

Такое сотрудничество осуществляется через организацию речи, при которой одинаково



активны все ее участники. Подобная форма отношений отнюдь не пренебрегает различиями жизненного опыта и уровней образованности преподавателя и студента. Они обмениваются идеями, обладая равным достоинством и правом на суждение.

При использовании интерактивных методов обучения получение образования становится увлекательным и востребованным, возрастает мотивация студентов к учебе.

Литература

1. *Китайгородская Г.А. Методика интенсивного обучения иностранным языкам/Г.А. Китайгородская. - М.: Высшая школа, 1991.*
2. *Митрофанова О.Д. Методика преподавания русского языка как иностранного / О.Д. Митрофанова, В.Г. Костомаров. - М.: Русский язык, 1990.*



CONSUMER ATTITUDE AND PURCHASE INTENTION TOWARDS ORGANIC APPAREL WITH SPECIAL REFERENCE TO COIMBATORE CITY

Dr.M.Nithya Devi¹, L.Yasodha Devi²

¹Associate Professor in Commerce, Kamban College of Arts & Science, Sultanpet ,
Coimbatore-641669

²Ph. D Research Scholar, Kamban College of Arts & Science, Sultanpet , Coimbatore-641669

ABSTRACT

This paper aims to make a comprehensive review of consumer attitude and purchaser decision towards organic apparel products. Research studies concerned with factors having impact on consumer attitude and purchase intention towards organic apparel .These factors include different Age groups, Gender, Monthly Income, Health Consciousness, Consumer Knowledge, Environmental Concern and Personal Norms. The knowledge, attitudes and behaviour of consumers towards sustainability and ecological fashion were explored through a survey of 87 participants and data were analysed using ANOVA and linear regression model. The attitude of participants towards sustainability was found to be positive. In addition, the knowledge level of participants was determined to be above the average in terms of ecological fashion. Their attitudes towards ecological fashion were also positive. Yet, this positive attitude does always reflect positively on purchase intention. The results of this study provide a better understanding of the different factors that can influence consumer attitudes and purchase intention towards eco fashion and corresponding products, and thus will facilitate the implementation of relevant company strategies.

KEYWORDS: consumer behaviour , Textile products, Consumer attitude, fashion.

INTRODUCTION

Textile market is one of the most vital markets in the world. Empathetic factors influencing consumer behaviour is one of the practices used in contemporary marketing of textile products. This method could be employed to create a textile company strategy attracting and advertising for target consumer. Consumer orientation marketing is a contemporary marketing technique based on consumer needs and wants. This technique aims at producing items and goods that people willing to buy. In other words, consumer demand is the focus of this marketing practice. One of the approaches applied in this technique is called consumer-driven approach. In which consumer needs are the driving force of all marketing decisions. Consumer needs include the nature, condition and characteristics of the product itself. Manufacturers and sellers of textile products might lose consumers as they are not aware of their needs and not finally understanding their wants and preferences.

The continued viability of textile industry is based on the capability of manufacturers, advertisers, and retailers to predict, develop, and communicate styles of clothing and other textile products that conform to the desires of the consuming public .Researchers have been long studying consumer behaviour and retort for textile products. It was found important for researchers to carry out an inclusive review for these research studies in order to identify and limit the key factors affecting consumer attitude. This study will focus on target customers' evaluative criteria for various textile and garment items. This would be useful for researchers in the textile and apparel area in order to focus their forthcoming studies and investigations on the factors might affect purchasers' decision and not studied yet. Practically, this will be an informative research for textile, apparel and fashion designers, manufacturers and advertisers in order to put into consideration features could affect their product characteristics. In this



research two main areas will be discussed, namely; market and consumer dominated variables.

REVIEW OF LITERATURE

Ayman and kaya in 2014 showed that consumer attitude towards branded fashion apparel is affected by gender. 83% of the participants were found significantly buying branded apparel products (60% women/40% would like to purchase and wear branded clothing more than men. They indicated that men are highly influenced by social/cultural factors. However females are affected by marketing communication efforts such as television, advertising, magazines, catalogues and celebrities, and by both personal selling and direct marketing.

Giovannini et al. in 2015 studied generation Y consumption of luxury fashion in United States. There were found positive relationship between consumers' self-esteem and brand conscious leading to strong motivation towards purchasing strongly connected brands with them. This would build consumer brand loyalty and support purchase intention to luxury fashion products. As they prefer buying brand name supporting their view with their peers. Moreover, they chose brands reflecting their self-image. These findings indicated that it is important to understand generation Y "new comers" to luxury fashion market in the light of their personality and consumption motivations. Luxury fashion brands should build brand consciousness reflecting young generation of consumers.

Health Consciousness

Consumers incline towards wearing organic cotton apparel due to the health benefits of organic products, despite of that rare literature available on the consumption of conventional cotton fabric which has traces of the pesticide residues which may be harmful. (Hustvedt & Dickson, 2009). A study conducted in Korean consumers show more anxieties with their health because their health is seriously vulnerable by their environmental pollution, which also found that pollution is produced by agricultural chemicals. For instance, they are considering that current rates allergies and diseases are due to agricultural chemicals. Although, Korean consumers become more health conscious with the development of their economy which has given them financial resources to perform this behaviour. So, this trend may lead the positive consumer attitudes towards the purchase of organic cotton apparel.

Environmental Concern

The environmental behaviour consists on consumer actions threatening the natural environment, it may be the utilization of the resources relevant to the environment. The addition of scepticism in the study measure the consumer intention toward the purchase of textile products

previously for American organic consumer (Hustvedt & Dickson, 2006). They found that scepticism is an insignificant predictor of purchase intention toward organic textile products. The consumers of organic cotton apparel known by social and processing claims that can be affected by a number of attitudes and beliefs. If this is framed as an environmental concern, then this concern of the environment can be an important psychographic variable. Environmental concern defined as "The possession of a concern for the eco-sphere itself or over the degradation of the eco-sphere created by human-being (Dunlap & Jones, 2002). Dunlap and Jones, define environmental concern as "Environmental concern refers to the degree to which people are aware of problems regarding the environment and support efforts to solve them or indicate a willingness to contribute personally to their solution". Environmental concern may be measured at the least specific or the most general levels, Concern for the environment can be measured at the most general (least specific) levels, where it looks like an ideology.

PERSONAL NORMS

Personal norms are beliefs of an individual that's behave in such a confident manner which might be correct or incorrect (Schwartz, 1973). Previous researches show that personal norms influence the consumer attitude more positively toward the selection of organic and inorganic textile products. also found that including self-identity along with the variables of the theory of planned behaviour and personal norm of perceived ethical obligation in their survey of ethical consumers slightly improved the ability of the model to predict the purchase intention of organic products. Following hypothesis was developed on the basis of literature review.

Consumer Attitude and Purchase Intention

According to the theory of planned behaviour the behavioural intention in considered as dependent variable and numerous items has been used previously for the measurement of that variable. (Shen et al., 2003). Studies on socially responsible consumer behaviour have strongly supported the positive association between attitude and purchase intention in various sectors, such as organic food green hotels (Han, 2014), and environmentally friendly apparel (Kang et al, 2013). The strong and positive association between attitude and purchase intention has also been supported by Korean consumers. A study by Wesleya, Lee, and Kim's discuss that green purchase behaviour of Korean consumers' was greatly influenced by the attitude toward the purchase (Wesleya et al, 2012). Attitude of consumer towards the purchase of a product is closely link to its perceived benefits of product



(Alhakami & Slovic, 1994). Consumers have favourable attitude for purchasing organic textile products which they perceived as beneficial for their health. Few studies suggested that the consumers concerns and belief about environment lead towards the purchase of more eco-friendly or organic textile products (Hustvedt & Dickson, 2009).

OBJECTIVE OF THE STUDY

- To study on customer attitude towards organic apparel.
- To study on purchase intention towards organic apparel.

HYPOTHESIS OF THE STUDY

H1: Gender will positively affect the customer attitude towards organic apparel

H2: Age will positively affect the customer attitude towards organic apparel

H3: Income will positively affect the customer attitude towards organic apparel

H4: Health Consciousness will positively affect their purchase intention towards organic apparel.

H5: Consumer Knowledge will positively affect their purchase intention towards organic apparel.

H6: Environmental Concern will positively affect their purchase intention towards organic apparel.

H7: Personal Norms will positively affect their purchase intention towards organic apparel.

RESEARCH METHODOLOGY

The study is Empirical in nature. The area of the study refers to Coimbatore city. The study used only primary data. The primary data was collected from 90 (approximately 87) respondents by structural questionnaire method. As the total population size was unknown, purposive sampling method was adopted, the primary data had been collected from those who are purchasing organic apparel and the questionnaire was collected from public places. Required other data was collected from the sources like various websites, various publications, journals and Reports. For analysing the data, the researcher has used linear regression model and ANOVA.

Table 1
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.817 ^a	.667	.655	.478	.667	55.498	3	83	.000	1.584

a. Predictors: (Constant), Gender, Age, Income

b. Dependent Variable: Customer Attitude

Table gives result of regression model. It shows that the unadjusted multiple R for this data is .817, but that the adjusted multiple R is .655. The unadjusted

value of R² means that all subsets of predictor variables will have a value of multiple R that is smaller than .667

Table 2
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	37.969	3	12.656	55.498	.000 ^b
Residual	18.928	83	.228		
Total	56.897	86			

a. Dependent Variable: Customer Attitude

b. Predictors: (Constant), Gender, Age, Income

It can be seen from above table B, the next part of the output contains an analysis of variance (ANOVA) that tests whether the model is significantly better at predicting the outcome using the mean. Specifically, the F-ratio represents the ratio of the improvement in prediction of results from fitting the model. For the initial model the F-ratio is 55.498, which is highly significant ($p < 0.000$), it means that group of

predictors has positively influenced the Customer Attitude. The socio demographic variables such as Gender, Age and Monthly income have significantly influenced Customer Attitude.

**Table 3**
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.975	.203		14.684	.000	2.572	3.378		
1 Gender	-.107	.087	-.166	-1.224	.224	-.280	.067	.217	4.605
Age	.589	.083	.958	7.082	.000	.423	.754	.219	4.564
Income	-.237	.048	-.323	-4.970	.000	-.332	-.142	.951	1.052

a. Dependent Variable: attitude

Customer Attitude = 2.975-.107Gender+.589 Age-.237 Income

Table 4
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.700 ^a	.490	.465	.577	.490	19.720	4	82	.000	1.976

a. Predictors: (Constant), Health Consciousness, Consumer Knowledge, Environmental Concern, Personal Norms

b. Dependent Variable: purchase intention

Table gives result of regression model. It shows that the unadjusted multiple R for this data is .700, but that the adjusted multiple R is .465. The unadjusted

value of R² means that all subsets of predictor variables will have a value of multiple R that is smaller than .490

Table 5
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	26.285	4	6.571	19.720	.000 ^b
Residual	27.324	82	.333		
Total	53.609	86			

a. Dependent Variable: purchase intention

b. Predictors: (Constant), Health Consciousness, Consumer Knowledge, Environmental Concern, Personal Norms

It can be seen from above table B, the next part of the output contains an analysis of variance (ANOVA) that tests whether the model is significantly better at predicting the outcome using the mean. Specifically, the F-ratio represents the ratio of the improvement in prediction of results from fitting the model. For the initial model the F-ratio is 19.720, which is highly

significant ($p < 0.000$), it means that group of predictors has positively influenced the purchase intention. The independent variables such as Health Consciousness, Consumer Knowledge, Environmental Concern, and Personal Norms have significantly influenced purchase intention towards Organic apparel.

**Table 6**
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	.829	.380		2.182	.032	.073	1.585		
Health Consciousness	.252	.059	.423	4.280	.000	.135	.369	.636	1.573
1 Consumer Knowledge	.346	.107	.555	3.234	.002	.133	.559	.211	4.748
Environmental Concern	.099	.102	.166	.970	.335	-.104	.302	.213	4.691
Personal Norms	.252	.058	.354	4.341	.000	.137	.368	.932	1.073

a. Dependent Variable: purchase intention

Purchase Intention = .829+.252Health Consciousness +.346 Consumer Knowledge +.099 Environmental Concern +.252Personal Norms

CONCLUSION

The customer attitude and purchase intention towards ecological fashion have been studied extensively. The results demonstrate that participants have a positive attitude towards sustainability approach. However, this positive attitude of participants necessarily reflects on their attitude towards organic apparel. Yet, examining the relationship closely between attitudes and purchase intention shows that participants who have positive attitudes towards Health Consciousness, Consumer Knowledge, Environmental Concern, Personal Norms and demographic profile (Age, Income, Gender). For variables related to consumer, there were found impact for consumer lifestyle in recognizing the symbolic meaning of textile products. Consumer was found with good intention of buying textile and apparel products made in sweatshop-free labour conditions and eco-friendly manufactured products. However, they need to be well guided for these products. The current study is considered stimulating for future research directions to academia and practitioners. It was found that designers, manufacturers, and sellers of textiles and apparel products should be up to date with target consumer behaviour, which is affected by several variables dependent on market and consumer.

REFERENCE

1. Ayman U, Kaya AK. Consumption of branded fashion apparel: Gender differences in behavior. *SocBehav Personal* 2014; 42(Suppl 1 to Issue 1): 1S-8S.
2. Giovannini S, Xu Y, Thomas J. Luxury fashion consumption and Generation Y consumers: Self, brand consciousness, and consumption motivations. *JFMM* 2015; 19(1): 22-40.<http://dx.doi.org/10.1108/jfmm-08-2013-0096>.
3. Phau I, Teah M, Chuah J. Consumer attitudes towards luxury fashion apparel made in

sweatshops. *JFMM* 2015; 19(2):169-87.
<http://dx.doi.org/10.1108/jfmm-01-2014-0008>

4. Hustvedt G, Dickson MA. Consumer likelihood of purchasing organic cotton apparel: Influence of attitudes and self-identity. *JFMM* 2009; 13(1): 49-65.<http://dx.doi.org/10.1108/13612020910939879>
5. Gam HJ. Are fashion-conscious consumers more likely to adopt eco-friendly clothing? *JFMM* 2011; 15(2): 178-93.
6. Grant IJ, Stephen GR. Buying behaviour of "teenage" girls and key societal communicating factors influencing their purchasing of fashion clothing. *JFMM* 2005; 9(4):45067.<http://dx.doi.org/10.1108/13612020510620812>



A STUDY ON CUSTOMER SATISFACTION TOWARDS HIMALAYA PRODUCT SPECIAL REFERENCE WITH TIRUPUR DISTRICT

Yamuna.T¹, Mr. M .R.Chandra Sekar²

¹Student, Department of Commerce Dr.NGP College of Arts and Science, Coimbatore-48.

²Assistant Professor, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

ABSTRACT

This study is to identify the customer satisfaction level and the problems faced by the respondents while using Himalaya products. The data has been collected from 135 customers in Tirupur district by applying convenient sampling technique. Statistical tools such as percentage analysis, chi-square analysis and weighted score analysis have been used to analyse the data. The study has attempted to cast light on the preference of the customers also this study has necessitated the Himalaya manufacturing company to increase the awareness about its different products which are high in quality than their competitors.

KEY WORDS: Himalaya, Customer satisfaction, Awareness, Preference

INTRODUCTION

Customer satisfaction is a key factor in formulation of customer's desires for future purchase. Although satisfaction has been defined as the differences between expectation and performance, but there are differences between quality and satisfaction. Ayurveda or the science of life was an ancient, holistic system for diagnosis and treatment, perhaps like the oldest system of medicine known to the humanity.

Himalaya is a worldwide pioneer in the field of scientifically validated herbal healthcare. Its reputation is for clinically studied, pure, and safe herbal healthcare products that are based on extensive scientific validation and stringent quality controls. Himalaya is the present portfolio of pharmaceuticals, personal care, baby care, well-being and animal health products; Himalaya has evolved into a 'head-to-heel' herbal wellness company. To observe how Himalaya's most important asset and investing in them is vital to Himalaya.

From giving them the creative freedom to push the boundaries of research to fostering a culture of open communication and diversity, we believe that there nurturing work environment brings out the best in their team and allows Himalaya to develop the best

products. Each and every Himalaya employee is unique and contributes to the success of the organization.

Pioneering research by Himalaya's Research center has converted Ayurveda's herbal tradition into a complete range of proprietary formulations dedicated to healthy living and longevity. Today, worldwide, the Himalaya brand is synonymous with safe and efficacious herbal healthcare. Science and research lie at the heart of product development at Himalaya.

Although our scientists have studied more than 10,000 herbs and developed a range of over 300 products, we continue on our journey to unravel the mysteries of nature.

HISTORY

Every year, 300 million Himalaya products enter the homes of customers around the world. With a range of over 300 healthcare and personal care products including brands like Liv.52, Cystone, and Bonnisan, we touch the lives of millions of customers worldwide, giving them products that help them lead healthier, enriched lives. Himalaya's story began way back in 1930. A curious young man riding through the forests of Burma saw restless elephants being fed the root of a plant, Rauwolfia serpentina,



which helped pacify them. Fascinated by the plant's effect on elephants, this young man, Mr. M. Manal, the founder of Himalaya, wanted to scientifically test the herb's properties. With no money and only a pocketful of dreams, he pawned his mother's jewellery to buy a handoperated tabulating machine. The years that followed were a time of endurance and a test of the young man's patience, strength and passion. He spent his days learning about herbs from neighbourhood healers and his nights working on the machine to make a few hundred tablets. His vision was to 'bring the traditional Indian science of Ayurveda to society in a contemporary form'.

In a time when herbal products were regarded with scepticism, our founder's belief in the healing power of herbs was unwavering. He felt that if people were offered safe and effective herbal medicines, they would come to accept them as part of their healthcare routine. He believed that herbal medicines could and should be evaluated on the same quality and efficacy parameters as conventional medicine. After four years of researching the herb Rauwolfia serpentina, Serpina, the world's first natural antihypertensive drug was launched in 1934.

INSPIRATION

- MR. Manal got inspired when he went to a visit to Burma and found that Group of elephants were eating roots in order to pacify themselves. The plant name was Rauwolfia serpentina.
- He then made an extensive research on plant roots and scientifically was proved that roots had some characteristics to heal the animal. Thus by researches company come up with its AYURVEDIC PRODUCT that was anti-hypertensive drug in 1934.
- These days Himalaya is using techniques of Modern medical science to rediscover and opening of ayurvedic secrets.
- Confirmation of Himalaya's dedication towards high quality and consistency in herbal care
- Reveals as company was awarded with an ISO 9001:2000 certification in 2003.
- From the invention of the company has focused on developing safe, natural and innovative remedies that will help people lead richer, healthier lives.
- Himalaya have consumers in 67 countries, which rely upon HIMALAYA'S PRODUCTS.

STATEMENT OF THE PROBLEM

The Himalaya Company is an Indian multinational Company established by Mohammed Manal in 1930 and based in Bengaluru, Karnataka and India. Hence the statement of the problem is the

facial skin has to deal with bacteria, Viruses, Pollutants, dust dirt and dead skin cells. Thus face cleaning becomes imperative. Facial cleaning is the removal of excessive oil and other undesirable debris from your face. And for this, one of the most essential personal care products in face wash.

A few decades back, many Indians had not even heard of face washes. But today face washes have become synonymous with skin care usage of face wash is not confined to just cleaning; it has moved on and now help solve skin problems such as ache, rashes and so on. A face wash carries Several benefit and, as it has been universally accepted that soaps can be hazardous for facial skin, most of the companies dealing in face wash business are making merry.

OBJECTIVES OF THE STUDY

- To measure the level of awareness among customer towards Himalaya product.
- To ascertain the factor that influencing the customer on choosing of Himalaya product.
- To study about the customer level of satisfaction towards Himalaya product.

METHODOLOGY OF THE STUDY

Research methodology is a way to systematically solve the research problems. It may be understood as a science of studying how research is done scientifically. It includes the overall result design, data collection methods, and analysis procedure.

SAMPLE DESIGN

Convenient sampling method is adopted for the purpose of study.

DATA COLLECTION

Data was collected to both primary and secondary data source. Primary data was collected through questionnaire. The study was done in the form of direct personal interviews.

Primary data

Primary data is a data which is collected for the first time for the particular interest to collect more information. In this study, the primary data was collected using questionnaire.

Secondary data

Secondary data consists of information that already exists somewhere, having been collected for some other purpose. In this study, the secondary data was collected from studies, journals and websites.

**PERIOD OF THE STUDY**

This study is based on a primary data collection. The study was conducted for a period of three months from December 2020 to February 2021.

TOOLS USED FOR THE STUDY

The rules of statistics in research is to function as a tool in designing research, analyzing the data, drawing its conclusion from most research studies result in large volume of raw data that must be suitable reduced so that the same can be read easily and can be used for future analysis. The tools used for

- Simple percentage analysis
- Weighted average analysis
- Chi-square Test

REVIEW OF LITERATURE

M.Vijay and Dr. Suresh kumar (2019) Determinants of customer satisfaction towards herbal products in selected area of Tamil Nadu states that Ayurveda or the „Science of Life“ is an ancient, holistic for diagnosis and treatment, perhaps the oldest system of medicine known to humanity. At Himalaya the research will begins with the raw herbs

chosen from traditional texts, both from observations and experiences of indigenous plants. The objective is to find the current herbal products scenario in India. The result of the study will help the company to identify the satisfaction level of the customers and demand of various benefits provided and promotional activities adopted by the company.

Dr. T. Malathi and R. Sangeetha (2019) Consumption pattern of cosmetic products among college female students, a study focus on environmental impact factors states that beauty care substances or cosmetic products can be made either natural substances or chemical compounds to enhance both odor and appearance of human body. Today people are more concerned about their self-personality and self-consciousness; hence the demand for cosmetic products is increasing rapidly. The objective is to identify the environmental impact factors the purchase of cosmetics among college female students. Consumers are generally ecstatic when they think they are getting a good deal and to motivate them to purchase to by providing offers like buy one get one free deals, buy one get one half deals, and a free gift with purchase option.

SIMPLE PERCENTAGE ANALYSIS:**BUYER OF THE RESPONDENTS**

S.No	FACTORS	No. OF RESPONDENTS	PERCENTAGE
1	Frequently	42	31.1%
2	Very frequently	44	32.6%
3	Rarely	36	26.7%
4	Very rarely	13	9.6%
	TOTAL	135	100%

Source: Questionnaire

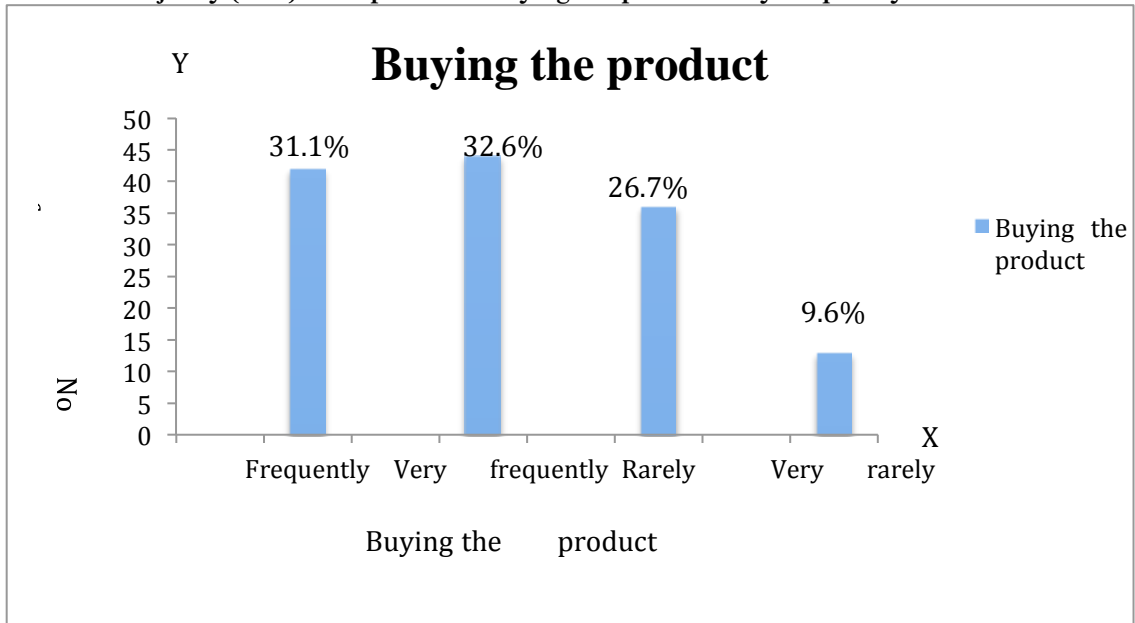
INTERPRETATION

The above table reveals that the buyer of the respondents. It is clear that 31.1% of respondents buying the product is Frequently, 32.6% of

respondents buying the product is Very frequently, 26.7% of respondents buying the product is Rarely, 9.6% of respondents buying the product is Very rarely.



Majority (32.6) of respondents buying the product very frequently



WEIGHTED AVERAGE ANALYSIS

HIMALAYA OFFERS THESE PARAMETERS

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
Large variety of products	32 160	24 96	51 153	3 6	25 25	135 440	3.26
Natural Ingredients	13 65	51 204	30 90	40 80	1 1	135 440	3.26
Customer Service	16 80	39 156	64 192	15 30	1 1	135 459	3.4
Fragrance	12 60	41 164	55 165	21 42	6 6	135 437	3.24
Shopping Experience	17 85	47 188	52 156	13 52	6 6	135 485	3.59

INTERPRETATION

The above table justifies that the Himalaya offers these parameters in shopping Experience. The

highest mean score rise 3.59 for the shopping experience.

**Chi-Square Test****RELATIONSHIP BETWEEN ANNUAL INCOME OF THE RESPONDENTS
MONTHLY AMOUNT SPEND FOR THE PRODUCT**

Annual income	Monthly amount spend				Total
	100500	5001000	10001500	Above 1500	
Below 1 lakh	25	20	8	2	55
1-2 lakhs	10	16	8	5	39
2-3 lakhs	6	8	11	5	30
Above 3 lakhs	3	3	3	2	11
TOTAL	44	47	30	14	135

To find out the association between Annual income and monthly amount spend for the product level of respondents, chi-square test is used and result is given below.

HYPOTHESIS

There is no significant between Annual income of the respondents and monthly amount spend for Himalaya product.

CHI-SQUARE TEST

Factor	Calculation	Df	Table value	Remarks
Annual income	15.024 ^a	9	16.92	Accepted

INTERPRETATION

The calculated value of Chi-square is less than the table value. Hence, the hypothesis is rejected stating that there is significant relationship between the income of their respondents and their monthly amount spend for the product.

wash is high cost and less quantity. The main competitors for them are Indhulekha, Amway, Lakhme, Garnier. Hence, it is concluded that retaining of customers is a real challenging to the manufacturer.

CONCLUSION

The modern marketing is highly competitive and transitional one. A company must decide what it can sell and what the approaches to satisfy the customer are. The customers today do not accept any product which does not find a place in the market. So it can be said that modern market is customer oriented and any product success or failure is determined only by the customer.

In this study it is found that Himalaya was the first mover among the other brands available in the market. Majority of the customers are satisfied with the product. The weakness of the Himalaya face

REFERENCES

1. M.Vijay and Dr. Suresh kumar (2019) *Determinants of customer satisfaction towards herbal products in selected area of Tamil Nadu*.
2. Dr. T. Malathi and R. Sangeetha (2019) *Consumption pattern of cosmetic products among college female students*.
3. *International Journal of Interdisciplinary and Multidisciplinary Studies* 2015, Vol 2, No.5,99-101. ISSN: 2348-0343.
4. *International Journal of Management Studies (ISSN) 2249-0302 ISSN 2231-2528*.



A STUDY ON CUSTOMER SATISFACTION LEVEL TOWARDS HP LAPTOPS

J.Arokia Ashwin Kumar¹, Dr. S. Gandhimathi²

*¹DrNGPASC 2020-21 COM045, B.com Student, Department of Commerce,
Dr.N.G.P. Arts and Science College (Autonomous), Coimbatore.*

*²Associate Professor, Department of Commerce, Dr.N.G.P.
Arts and Science College (Autonomous), Coimbatore.*

ABSTRACT

Today technology has brought the world in own hands human being very much to the complicated work in to easier. Gradually the invention and discoveries are made from time to time has head us to a comfortable world. One such significant is the laptop. The objectives of the study are to know access the cost and performance of HP laptop and evaluate satisfaction level of the customer towards HP laptop. The sample size of the study was conducted in Coimbatore city with 115 respondents through random sampling method. The tools and techniques are used frequency distribution method. Majority of the members use the laptop for studies. Majority (45.45%) of respondents awareness are through friends & relatives. Majority (37.27%) of the respondents are aware of the hardware configuration in laptops.

KEYWORDS: *HP Laptops, Customer Satisfaction.*

OBJECTIVES OF THE STUDY

- To analysis the level of satisfaction towards HP laptop spares.
- To analysis the problems of the laptop users.

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem a research design is purely and frame work or plan to study the system that guides the collection and analysis of data,

Data collection

There are two types of data

- Primary data
- Secondary data

Primary data

The study mainly uses primary data collection through a specifically designed questionnaire these questionnaire are given to the customer to collect data from them.

Secondary data

Were collected from customer report manuals journals magazines websites etc., These data are help full in describing about details like its nature profit of the product etc..

Sampling size

Out of the entries population 110 respondents were chosen as the samples.

Sample design

The type of the study for this project is descriptive research includes survey and fact finding enquiries of different kids the major purpose of descriptive research is description of the state of affairs as it exists of present the main characteristic of this method is that Research has no control over the variable he can only report what has happened or what is happened.

Sampling

The sampling design used in this project is convenient sampling.

**Tools of analysis**

The statistical tools used for this research are

- Simple percentage analysis
- Chi-Squared test

Simple percentage

The percentage refers to a special kind of ratio percentage is used in making comparison between two or more series of data. Percentage analysis helps to find which factors are significant among a number of factors.

$$\text{Percentage analysis} = \frac{\text{No of respondents}}{\text{Total no of respondents}} \times 100$$

Chi-Squared test

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

A chi-squared test, also written as χ^2 test, is a statistical hypothesis test that is valid to perform when the test statistic is chi-squared distributed under the null hypothesis, specifically Pearson's chi-squared test and variants thereof. Pearson's chi-squared test is used to determine whether there is a statistically significant difference between the expected frequencies and the observed frequencies in one or more categories of a contingency table.

Chi-squared distribution, showing χ^2 on the x-axis and p-value (right tail probability) on the y-axis. In the standard applications of this test, the observations are classified into mutually exclusive classes. If the null hypothesis that there are no differences between the classes in the population is true, the test statistic computed from the observations follows a χ^2 frequency distribution. The purpose of the test is to evaluate how likely the observed frequencies would be assuming the null hypothesis is true.

Test statistics that follow a χ^2 distribution occur when the observations are independent and normally distributed, which assumptions are often justified under the central limit theorem. There are also χ^2 tests for testing the null hypothesis of independence of a pair of random variables based on observations of the pairs.

Chi-squared tests often refer to tests for which the distribution of the test statistic approaches the χ^2 distribution asymptotically, meaning that the sampling distribution (if the null hypothesis is true) of the test

statistic approximates a chi-squared distribution more and more closely as sample sizes increase.

RANKING ANALYSIS

Ranking is one of the simple and efficient data collection techniques to understand individuals' perception and preferences for some items such as products, people, and species. Ranking data are frequently collected when individuals are asked to rank a set of items according to a certain preference criterion.

REVIEW OF LITERATURE

A literature review is a description of the literature relevant to a particular field or topic. This is often written as part of a thesis proposal, or at the commencement of a thesis. A critical literature review is a critical assessment of the relevant literature. Literature covers everything relevant that is written on a topic: books, journal articles, newspaper articles, historical records, government reports, theses and dissertations, etc. The important word is 'relevant'. A literature review gives an overview of the field of inquiry: what has already been said on the topic, by the key writers.

Raghubir Singh, (2002) conducted a study "consumers brand choice behaviour for television sets" in Amristar. They found that consumers purchase decisions are always influenced.

A vast number of factors which lead them to select a particular brand in preference to others.

S.L. Jarvenpaa (2008) in their article entitled, "Exploring the Implications of M-convenience for Markets and Marketing" have identified that the unique intrinsic attributes mentioned by the end users are unhindered time and space attributes of the mobile phone. The extrinsic attributes are divided as direct and indirect network. Direct network is the effect of the size, speed and capacity of the network, whereas, indirect network is the effect originating from the information, transaction, or machine interactive services.

Mishra B.S. (2012) examines whether allocative efficiency of Indian banking system has improved after the introduction of financial sector reforms in the early 1990s. Efficiency for 23 states of India is also compared and finds improvement in overall allocative efficiency of majority states in the post-reforms period. The study also concludes that improved efficiency is more marked for the service sector than for industry.



across the states as agriculture and industry sector witness a decline in allocative efficiency.

Casu B. and Molyneux P. (2016) evaluate the productive efficiency of European banks during 1993-1997 by using efficiency measures derived from Data Envelope Analysis (DEA). The study concludes that since the EU's Single Market Program there has been a small improvement in bank efficiency level and there are marked differences in bank efficiency levels across EU countries which are mainly because of country specific aspects of the banking technology.

Lewis (2019) says "For a given capital outlay on oil and renewable , how much useful energy at the wheel do we get? Our analysis indicates that for the same capital outlay today, new wind and solar-energy projects in tandem with battery electric vehicles will produce six to seven times more useful energy at the wheels than will oil at Rs.3200 per barrel for gasoline powered light-duty vehicles, and three to four times more than will oil at Rs.3200 per barrel for light-duty vehicles running on diesel".

CHI-SQUARE ANALYSIS

TABLE. 1

Factor	Chi-Square test		
	Value	DF	Asymptotic Signature (2sided)
Price	3.634a	3	0.304
Labour	2.602a	4	0.626
Profit	10.032a	4	0.04
Demand	7.951a	5	0.159
Storage facilities	9.555a	4	0.049

Chi- Sqaure

- We conclude that there is no relationship between Gender and satisfaction with the price.
- We conclude that there is no relationship between Gender and satisfaction with the labour.
- We conclude that there is relationship between Gender and satisfaction with the Profit.
- We conclude that there is relationship between Gender and satisfaction with the Demand.
- We conclude that there is relationship between Gender and satisfaction with the Storage Facilities.

TABLE.2

Ranking Analysis

FACTORS	1 (6)	2 (5)	3 (4)	4 (3)	5 (2)	6 (1)	TOTAL	RANK
INTER BASE	37 (222)	43 (215)	20 (80)	29 (87)	16 (32)	15 (15)	651	I
DATA TRANSFER	14 (84)	26 (130)	40 (160)	22 (66)	28 (56)	30 (30)	526	VI
PROCESSOR	49 (294)	31 (155)	14 (56)	26 (78)	8 (16)	32 (32)	631	III
SCREEN DISPLAY PROBLEM	36 (216)	17 (85)	29 (116)	23 (69)	31 (62)	24 (24)	572	V
AUDIO PROBLEM	18 (108)	56 (280)	32 (128)	24 (72)	17 (34)	13 (13)	635	II
OVERHEATING PROBLEM	9 (54)	41 (205)	33 (132)	57 (171)	5 (10)	15 (15)	587	IV



The above table shows the overall satisfaction level of the respondents have given,

- We consider as First rank to Inter base.
- We consider as Second rank to Audio problem.
- We consider as Third rank to processor.
- We consider as Fourth rank to Overheating problem.
- We consider as Fifth rank to Screen display problem.
- We consider as Sixth rank to Data transfer.

SUGGESTIONS

- Television advertisements should take up in a wide angle to create more awareness about the products.
- To make aware of the customers about the good quality provided for the HP laptop.
- Customer felt that gift session can be increased.
- Qualitative of service helps to increase the sale of the product.
- Cost efficiency is comparatively better than other products
- Discount and gifts can boost up the sales of the product.

CONCLUSION

To conclude the project work done at H.P Laptop has widened the present satisfaction level of customers. We have gained more knowledge about the sales and services of HP laptop further implementing the suggestion given by the customers help them to create more satisfaction on their sales. The companies can provide proper facilities to retain and satisfy the customers.

REFERENCES

1. *Loudon and Bitta Research Methodology , Methods and techniques Wishwa Prakashan . New Delhi-2005.*
2. *Fish bein , Taylor, James R, Marketing Research, An Applied Approach Third Edition MC Graw-Hill International Edition. Singapore - 2009.*
3. *Banerjee G Riffeth and peter W. Hom, Retaining Valued Respondents, Saga publications , inc , Thousand Oaks , CA , 2008,p.2*
4. *Peter bron 2004,statistical methods,New Delhi,Sultan Chand&company,1998*



A STUDY ON PROBLEMS OF HUMAN RESOURCES MANAGEMENT AND THEIR IMPACT IN ORGANISATIONAL PERFORMANCE IN TNQ TECHNOLOGIES

P.Alfred Godwin¹, Dr. R.Guna Sundari²,

¹(DrNGPASC 2020-21 COM098), III B.Com Student, Department of commerce,
Dr. NGP Arts and Science College, Coimbatore - 48.

²Professor, Department of Commerce, Dr. NGP Arts and Science College, Coimbatore - 48.

ABSTRACT

Human Resource Management is an indispensable function for the both the private and public sector organizations. The process deals with several operational objectives such as recruitment, providing proper training to the employee, selection of the employee, assessment of the employee, motivating and maintaining a proper relationship with the employee and maintaining welfare and health for the employees in the organization through laws created by the concerned state and country. The human resource management is a process through which the organization utilizes their limited skilled workforce. The main intensions make performance utilization of the existing human resource for the organization. The higher performance work practices are human resource work practices that aimed at influencing and enhancing the organizational and employee performance. Therefore, the present study has also focused on the investigation of the impact of the higher performance work practices on the organizational performance of the Indian firms. For that purpose, the bundle of higher performance work practices was evaluated. These higher performance work practices are feedback, performance appraisal, employee suggestion systems and affective job description and specification.

KEYWORDS: Feedback, employees, appraisal

INTRODUCTION

TNQ is a publishing technology and services company based in Chennai, India. Founded in 1998, TNQ today serves some of the world leaders in STM publishing - like Elsevier, Wolters Kluwer, Royal Society of Chemistry - across time zones from Australia to North America, specializing in Roman script composition and XML-first production processes. Technology and innovation led, TNQ is a global leader in niche aspects of STM publishing. Proof Central, the company's proofing platform, is fast-replacing PDF proofing processes, and is used by nearly a fourth of all STM journals globally. This transformational technology, first rolled out in October 2012, has received widespread acceptance and acclaim among end users, the authors. It eliminates errors that are inevitable in the content-integration process after PDF annotation, contributing substantially to publishers

OBJECTIVES OF THE STUDY

- Analyze the current performance appraisal format & compensation.
- Identifying inherent problems associated with the format.
- Propose changes mainly in the guidelines, format and management philosophy by keeping relevance with other processes.
- To examine Employee Personnel practice.

RESEARCH METHODOLOGY

Research methodology is the way to evaluate the research problem scientifically.

Primary data: It is collected through questionnaire.



Secondary data: collected from journals, books and websites.

inference. Further, the following specific tools were used,

TOOLS USED IN THE STUDY

The data collected by the respondents are first classified into two things like in tabular and

- Simple percentage
- Chi- square
- Rank analysis

SIMPLE PERCENTAGE ANALYSIS

TABLE - 1
AGE OF THE RESPONDENTS

AGE GROUP	NO OF RESPONDENTS	PERCENTAGE
BELOW 20 YEARS	12	9.6%
21 – 30 YEARS	75	60%
31 – 40 YEARS	36	28.8%
ABOVE 40 YEARS	2	1.6%
TOTAL	125	100%

SOURCE: primary data

INTERPRETATION

The above table shows that 9.6% of respondents are in the age group of below 20 years;

60% are 21-30 years; 28.8% are 31-40 years; 1.6% are above 40 years.

Table - 2
DEPARTMENT OF WORK

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
HRM	16	12.8%
FINANCE /ACCOUNTS	51	40.8%
MARKETING/SALES	44	35.2%
INFORMATION TECHNOLOGY	4	11.2%
TOTAL	125	100%

INTERPRETATION

The above table shows that 12.8% of the respondents are working in HRM; 40.8% of the respondents are working in finance /accounts department; 35.2% of the respondents are working for marketing/sales department and 11.2% of the respondents are working for information technology department.

**CHI-SQUARE ANALYSIS****TABLE - 1**
AGE AND FREQUENCY OF E-COM PURCHASE**HYPOTHESIS**

There is no significant relationship between the respondent's age and department of work.

AGE	DEPARTMENT OF WORK				TOTAL
	HRM	FINANCE / ACCOUNTING	MARKETING/ SALES	INFORMATION TECHNOLOGY	
BELOW 20 YEARS	1	7	2	2	12
21 - 30 YEARS	11	30	24	10	75
31 - 40 YEARS	4	14	17	1	36
ABOVE 40 YEARS	0	0	1	1	2
TOTAL	16	51	44	14	125

CHI - SQUARE TEST

FACTOR	CALCULATED VALUE	D. F	TABLE VALUE	REMARKS
AGE	9.124 ^a	9	16.92	REJECTED

INTERPRETATION

The calculated value of chi-square is less than the table value. Hence, the hypothesis is rejected

stating that there is no significant relationship between the respondent's educational qualification and motivating activities performed.

RANK ANALYSIS**TABLE.4.4.1**
OVERALL SATISFACTION LEVEL OF THE RESPONDENTS

PATICULARS	1(7)	2(6)	3(5)	4(4)	5(3)	6(2)	7(1)	TOTAL SCORE	RANKING
HR OPERATION	12 (84)	23 (138)	8 (40)	42 (168)	13 (39)	10 (20)	17 (17)	505	V
PERFORMANCE MANAGEMENT	24 (168)	18 (180)	12 (120)	27 (108)	34 (102)	7 (14)	3 (3)	563	II
COMMUNICATION	6 (42)	25 (150)	33 (165)	13 (52)	19 (57)	20 (40)	9 (9)	515	IV
RECRUITMENT	10 (70)	19 (114)	28 (140)	21 (84)	36 (108)	5 (10)	6 (6)	532	III
SKILL DEVELOPMENT	38 (266)	23 (138)	12 (60)	14 (56)	9 (27)	13 (26)	16 (16)	589	I
REWARDS & RECOGNITION	9 (63)	14 (84)	15 (75)	10 (40)	15 (45)	38 (76)	24 (24)	407	VII
WORKFORCE PLANNING	10 (70)	19 (114)	26 (130)	27 (108)	5 (15)	23 (46)	15 (15)	498	VI

INTERPRETATION

The above table shows the overall satisfaction level of the respondents that are ranked based on the respondents.

From the analysis it is understood that the respondents have given 1st rank to skill development,

2nd rank to performance management, 3rd rank to recruitment, 4th rank to communication, 5th rank to HR operation, 6th rank to workforce planning and 7th rank to reward and recognition.



LIMITATIONS OF THE STUDY

1. The data was collected from the respondents of Coimbatore district. So that findings may not consider for other district.
2. The information can be based due to the questionnaire. Time and cost factors which have limited the size of samplings as 125.

FINDINGS

Simple percentage analysis

- Majority of the respondents belongs to the age group of 21-30 (60%).
- Majority of the respondents work under the department of finance/accounts (40.8%).

Chi – square analysis

- There is no significant relationship between the respondent's age and department of work.
- There is no significant relationship between the respondent's educational qualification and motivating activities performed.

Rank analysis

The majority of the respondents consider skill development is the primary level of satisfaction of problem of HRM and their impacts in the organizational performance

SUGGESTIONS

- The organization should practice proper TNQ technologies guideline. The purpose of Human Resource Management is to improve the productive contribution of people.
- To get effective and efficient employee, the organization should arrange proper training and development programs.
- The entire HR department should be well informed regarding the employment personal.
- The organization should provide well direct compensation as well as direct to its staffs.
- The management should have job evaluated salary structure, which is most competitive than other organizations in the country.
- To evaluate employee's performance; the management should follow promotion policy properly.

CONCLUSION

Human Resource Management is a continuously practicing issue so it plays a significant role on organizations overall performance. If an organization wants to gain full benefit from human resource management it should follow all the sections of HRM. Committed and trustworthy employees are the most significant factors to becoming an employer of choice, it is no surprise that companies and

organizations face significant challenges in developing energized and engaged workforces. However, there is abundance of research to demonstrate that increased employee commitment and trust in leadership can positively impact the company's bottom line. In fact, the true potential of an organization can only be realized when the productivity level of all individuals and teams are fully aligned, committed and energized to successfully accomplish the goals of the organization. Thus, the objective of every company should be to improve the desire of employees to stay in the relationship they have with the company.

REFERENCES

1. C.B. Gupta, (1996) *Human Resource Management, Sultan Chand & Sons.*
2. K. Ashwathapa, (1997) *Human Resource and Personnel Management, Tata Mc. Graw Hill*
3. Dr. C.R. Kothari, (2008) *Research Methodology*
4. Chris Duke, (2001) *Recruiting the right staff*

WEBSITES

1. www.google.com
2. www.en.wikipedia.org
3. www.citehr.com
4. www.enwebworld.com
5. www.scribd.com



A STUDY ON CUSTOMER SATISFACTION AND PREFERENCE TOWARDS LAKME BRAND PRODUCTS

Baby Maheswari¹, Mr. P. Vimal Kumar²

¹DRNGPASC 2020-21 COM 89, Student, Department of Commerce, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

²Assistant Professor, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

ABSTRACT

This study is to identify the customer satisfaction and customer preference level and the problems faced by the respondents using lakme brand products. The data has been collected from 135 customer by applying convenient sampling technique. Statistical tools such as percentage analysis, chi-square analysis and weighted score analysis have been used to analyse the data. The study has attempted to cast light on the preference of the customers also this study has necessitated the Lakme company to increase the awareness about its different varieties of products which are high in quality when compared to others brands.

KEY WORDS: Lakme, Customer satisfaction, Awareness, Preference.

INTRODUCTION

Customer satisfaction has been subjects of the great interest to the organizations and researcher like. The prime objective of organizations is to maximize profits and to minimize cost. Profit maximization can be obtained through increase in sales with lesser costs. Profit maximization can be obtained through increase in sales with lesser costs. One of the important factors that can help to increase sales is customer satisfaction, because satisfaction leads to customer loyalty, recommendations and repeat purchasing. A customer is an individual or business that purchases the goods or services produced by a business. Attracting customer is the primary goal of the businesses, because it is the customer who creates for goods and services.

Lakme is an Indian cosmetics brand which is owned by Hindustan Unilever. Having Kareena Kapoor and chamma as the ambassador, it ranked at number 1 among the cosmetics brands in India. Lakme started as a 100% subsidiary of Tata Oil Mills (Tomco).

It was named after the French opera Lakme which itself is the French form of Devi Lakshmi (the Hindu goddess of wealth) who is renowned for her beauty. It

was started in 1952 famously, because then Prime Minister Jawaharlal Nehru was concerned that Indian women were spending precious foreign exchange on beauty products and personally requested JRD Tata to manufacture them in India. Simone Tata joined the company as director and went on to become the chairperson. In 1996, Tata sold off their stakes in Lakme Lever to HUL, for Rs 200 Core.

STATEMENT OF THE PROBLEM

This research is aiming to find out the consumer satisfaction towards the Lakme brand products. The research on consumer satisfaction helps to identify the consumers and to know the consumers preferences, choice, taste and other quality parameters by conducting a through analysis and survey with vibrant Statistical methods.

By the introduction of other new brand cosmetics some customers are changing their preference to other brand cosmetics, so to find out the reason why the consumers are switching over to other brands and to know why customers are choosing the particular brand in the market.



SCOPE OF THE STUDY

This study uncovers the impact, utility and effectiveness and efficiency of marketing strategies of lakme on the success of cosmetic industry and to know the satisfaction and preference towards lakme brand . A special emphasis is laid down on lakme cosmetics. The project begins with detailed information about marketing strategies and the impact of measuring customer satisfaction in cosmetics industry. Further, it covers topics as data collection tools and research methodology used for the project. Then it gives a complete analysis of the data collected and it is then used to reach a conclusion.

The study is useful for the better understanding of marketing strategies towards the lakme cosmetic industry. For the purpose of the study, a questioner was designed based on different parameters to judge and understand the customer satisfaction towards lakme cosmetics. Target group of the project was mainly lakme customers. As this study is confined to lakme, it covers an analysis of the customer satisfaction, attitude, perception, marketing strategies with respect to lakme as a brand in cosmetics industry.

OBJECTIVES OF THE STUDY

- To know the social economic characteristics of the consumer.
- To know the brand preference of the consumer towards lakme products.
- To find out the satisfaction level of consumers towards lakme products.
- To analyze the usage of lakme brand products.
- To examine the problem faced by the customer using lakme products.

RESEARCH DESIGN

The research design is the blueprint for the fulfilment of objectives and answering questions. It is a master plan specifying the method and procedures for collecting and analysing needed information.

DATA COLLECTION

The source of data includes primary and secondary data sources.

PRIMARY DATA

A primary data is a data which is collected for first time for the particular interest to collect more information. In this study, the primary data was collected using questionnaire.

SECONDARY DATA

Secondary data consist of information that already exists somewhere, having been collected for some other purpose. In this study, the secondary data was collected from studies, magazines, journals and websites.

SAMPLE DESIGN

Sample design is definite plan determine before any data is actually obtaining for a sample from a given population. The researcher must decide the way of selecting a sample. Samples can be either probability samples or non-probability samples.

SAMPLE SIZE

The sample size selected for this study is 135 respondents.

PERIOD OF THE STUDY

The study was conducted for the period of four months. The primary data was collected and it took one month time period. The review of literature and discussions with the field experts in the species board took another one month. Data analysis and interpretation was carried for a period of one month and final period of the report took the remaining period.

LIMITATION OF THE STUDY

- Time is a major limitation, extensive study was not possible mainly due to time constrain.
- Customer opinions may vary at different time, because of their psychological instincts.
- The accuracy may have suffered because of the respondent consumers recording of what they think was right as against what they do.
- The sample size taken for the study is limited only to 135 respondents.

TOOLS USED FOR THE STUDY

The collected data were analyzed and interpreted properly to find the results of the research work. Conventional tools like descriptive tables and percentage were used for the purpose of analysis. The graph and charts have also been made use of where ever necessary. Further, the following specific tools were used,

- Simple percentage analysis
- Ranking analysis
- Weighted average analysis
- Chi-square analysis

**REVIEW OF LITERATURE**

Shukla Monika (2013) made an attempt to study the factors affecting impact of advertisement of selected Cosmetics items of consumer choice. The respondents opinion towards advertisement of fairness cream, Personal characteristics, demographic factors were taken into account and it was found that consumers practice Related to advertisement of fairness cream affected the impact of advertisement of product on their choice in a Significant manner.

Sangeeta Gupta, Simple Arora (2013) in their study on the factors influencing the consumption pattern of Cosmetics by male, revealed that the media is playing vital role in attitudinal change in the societal context. It Was also stated clearly that there is certainly a strong bond between self image, media and societal expectation With respect to the consumption of cosmetics among the urban males in Delhi.

KEY FACTS

- Takes pride in being the Indian beauty expert for over 65 years.
- It is a Lakme is the country's first cosmetic brand to introduce makeup to Indian women and complete beauty brand spanning colour cosmetics & skin care and extends to beauty services through the network of Lakme Salons.
- Its bond with beauty and fashion is manifested through the Lakme Fashion Week, which is now the largest fashion event of its kind in the country.

PRODUCTION STRATEGY

In the organized makeup industry, Lakme continues the dominant player. With cosmetics being used in India and more women move to work in urban areas, specialists are saying there is increasing pressure to come up with the chic product. With a range of products and fresh additions, the firm has reacted to numerous difficulties and seeks to reinforce its strategy within the manufacturing department.

The one size fits all strategy will not work in which Lakme has to formulate separate sections and place their products for the masses of people and classes accordingly. Under which output is classified as segmentation of demographic, demographics and psychographic. **LAKME AT PRESENT**

The Tatas sold Lakme to Hindustan Unilever, the rapidly growing company in the FMCG sector in 1996. Today, the company has over 300 diverse products that are sold in more than 70 countries worldwide. Their wide price range, starting from Rs 100 to the most expensive ones at Rs 1,000, caters to every kind of audience.

Despite the cut-throat competitions from homegrown as well as international cosmetic brands, Lakme has managed to thrive in the industry over the years. It is probably one of those brands that have transformed society in more ways than one.

As for my aunt, Meeta, Lakme is her go-to brand even today. Over the years she has seen it grown and accepted in society. And while many mistakenly associated the 70-year-old homegrown brand as 'foreign', for her, it will always be a patriotic gift.

SIMPLE PERCENTAGE ANALYSIS**TABLE 1****RATE THE QUALITY OF LAKME PRODUCT**

S.NO	RATE THE QUALITY	NO.OF RESPONDENTS	PERCENTAGE
1	Very highly quality	11	8.1%
2	High quality	45	33.3%
3	Neutral	59	43.7%
4	Low quality	20	14.8%
5	Very low quality	0	0%
	TOTAL	135	100%

Source: Questionnaire

INTERPRETATION

The above table reveals that the quality of lakme product by the respondents. It is clear that 8.1% of the respondents are given as very high quality ,33.3% of

the respondents are given as high quality,43.7% of the respondents are given as neutral,14.8% of the respondents are given as low quality, there is no respondents in very low quality.

**TABLE 2****REASON FOR CHOOSING LAKME PRODUCT**

S.NO	REASON	NO.OF RESPONDENTS	PERCENTAGE
1	Cheap price	7	5.2%
2	Brand name	45	33.3%
3	Quality	48	35.6%
4	Varity	24	17.8%
5	Advertisement	11	8.1%
6	Others	0	0%
	TOTAL	135	100%

Source: Questionnaire

INTERPRETATION

The above table reveals that the reason for choosing lakme brand by the respondents. It is clear that 5.2% of the respondents are choosing for the reason of cheap price, 33.3% of the respondents are choosing for the reason of brand name, 35.6% of the respondents are choosing for the reason of quality, 17.8% of the respondents are choosing for the reason of variety of the product, 8.1% of the respondents are choosing for the reason of

advertisement, there is no respondents in choosing others.

WEIGHTED AVERAGE ANALYSIS

Under this method, the respondents are asked to rank their choices. This method involves ranking of the items given. To secure a ranking of all the items involved, the researchers total the weights which are given to each item. The heighted weighted score is ranked first and correspondingly the other ranks are assigned

WEIGHTED AVRERAGE ANALYSIS**SATISFACTION LEVEL TOWARDS SERVICE PROVIDED BY LAKME**

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
Price	85	23	21	1	5	135	4.13
	425	92	63	2	5	558	
Quality	14	97	17	6	1	135	3.87
	70	388	51	12	1	522	
Variety of product	30	24	73	6	2	135	3.55
	150	96	219	12	2	479	
Packing	23	42	26	41	3	135	3.30
	115	168	78	82	3	446	
Availability in all shop	22	45	25	10	33	135	3.10
	110	180	75	20	33	418	

INTERPRETATION

The above table shows the various satisfaction level towards service provided by lakme products. The highest mean score rise 4.13 for the price.

FINDINGS OF THE STUDY**SIMPLE PERCENTAGE**

- Majority (56.3%) of the respondents are between the age of 21-30 years.
- Majority (88.1%) of the respondents are female.
- Majority (56.3%) of the respondents are unmarried.

- Majority (62.2%) of the respondents are under graduate.
- Majority (40.75) of the respondents earning from Rs.20,000 to Rs.30,000.
- Majority (37.8) of the respondents are professionals.
- Majority (65.2%) of the respondents are nuclear family type.
- Majority (58.5%) of the respondents family members is between 3-4.
- Majority (38.5%) of the respondents use cosmetics when they wish.



- Majority (39.3%) of the respondents spend amount on lakme products is between Rs.200-400.
- Majority (34.8%) of the respondents are using kajal.
- Majority (43.7%) of the respondents are given as neutral.
- Majority (35.6%) of the respondents are choosing for the reason of quality.
- Majority (54.1%) of the respondents are given yes.
- Majority (44.4%) of the respondents are given as neither easily nor difficulties available.
- Majority (70.4%) of the respondents are given yes.
- Majority (43%) of the respondents are aware of direct sales.
- Majority (84.4%) of the respondents are given no.
- Majority (53.3%) of the respondents are using in the time period 2-3 years.
- Majority (51.9%) of the respondents are neutral .
- Majority (57.8%) of the respondents are given easily available .

WEIGHTED AVERAGE

The above table shows the various satisfaction level towards service provided by lakme products. The highest mean score rise 4.13 for the price.

SUGGESTIONS

- Majority of respondents feel that, the price of Lakme products is high. So the company is suggested to reduce the price of the product.
- Most of the consumers are facing the main problem of quantity from their Lakme products. The company should bear in mind to take measures to increase the Quantity.
- The consumers expect the company to offer free offers. So the company should take necessary steps to provide various offers which would help to capture a better market.
- Attractive and effective advertisements through various media should be repeatedly given in order to capture the attention of potential consumers
- As a majority of respondents are influenced by advertisement, especially by Television media, it is better for the company, to improve the impact of advertisement in other media also.

CONCLUSION

In this study, we discovered the impact of advertising on the brand image and brand identity of cosmetics. A study shows the use of Lakme products by most people who use it in India. The product fulfils the wishes of the company in addition to the wishes of the consumers. In one investigation, I found that people appreciated the easy availability of various products. Cosmetics industry in India - this section made it clear those cosmetics in India is not a new concept. People take care of themselves physically. The only difference is the addition of chemicals and technology to our personal care. Advertising and promotion are essential for cosmetics and personal care products to educate consumers about new products and strengthen brand loyalty. Advertising on television and in print media, such as newspapers and magazines, especially women's magazines, is widespread. Samples of toiletries are distributed to households and bag products are attached to magazines. During the promotional periods, free gifts are offered and promoted in the main local newspapers and on the Internet. and the image and identity of the Lakme product are primarily domestic products and much emphasis is placed on celebrity recognition. Lakme's marketing strategy is to offer new products year after year. Lakme will continue to enable cosmetics companies, like a great customer understanding, to develop suitable products, to correctly price them and increase their profitability.

REFERENCES

1. *Monika.S (2013). A Study of Factors Affecting Impact of Advertising of Selected Digital Library of India.*
2. *Sangeeta Gupta, Simple Arora, (2013). Factors influencing the consumption pattern of male cosmetic in Delhi by a urban male. IOSR Journal of Business and management.*



A STUDY ON CUSTOMER EXPECTATION AND SATISFACTION TOWARD SERVICE PROVIDE BY AMBAL AUTO IN COIMBATORE CITY

Naveen Kumar. V¹, Mr. M .R. Chandra Sekar²

¹Student, Department of Commerce, Dr. NGP College of Arts and Science, Coimbatore-48

²Assistant Professor, Department of Commerce, Dr. NGP College of Arts and Science, Coimbatore-48

ABSTRACT

The automobile industry today is the most industry. High quality in service sector is important for comparativeness of service quantity is an essential matter for business in both public and private sector. In order to improve satisfaction of customer problem related service must be solved first ,as customer are much concern about after sales service .Satisfying customer is mainly belonging to identify their needs and demand to achieve target. This paper aims to know about the quantity in automobile service sector , important of customer satisfaction and strategies that can help to enhance quality service

KEY WORDS: *customer satisfaction, Quality, importance, its strategies*

INTRODUCTION

The Automobile industry in India is one of the largest in the world and one of the fastest growing globally. India manufactures over 11 million vehicles (including 2 wheeled and 4 wheeled) and exports about 1.5 million every year. It is the world's second largest manufacturer of motorcycles, with annual sales exceeding 8.5 million in 2009. India's passenger car and commercial vehicle manufacturing industry is the seventh largest in the world, with an annual production of more than 2.6 million units in 2009. In 2009, India emerged as Asia's fourth largest exporter of passenger cars, behind Japan, South Korea, and Thailand. As of 2009, India is home to 40 million passenger vehicles and more than 2.6 million cars were sold in India in 2009 (an increase of 26%), making the country the second fastest growing automobile market in the world.

According to the Society of Indian Automobile Manufacturers, annual car sales are projected to increase up to 5 million vehicles by 2015 and more than 9million by 2020. By 2050, the country is expected to top the world in car volumes with approximately 611 million vehicles on the nation's roads. A chunk of India's car manufacturing industry is based in and around Chennai, also known as the " Detroit of India" with the India operations of

BMW, Ford, Hyundai and Nissan head quartered in the city. Chennai accounts for 60 per cent of the country's automotive exports. Gurgaon and Manesar near New Delhi are hubs where all of the Maruti Suzuki cars in India are manufactured.

EVOLUTION OF THE AUTOMOBILE INDUSTRY IN INDIA

In India, since the early 1940s when the auto industry rolled out first passenger car, its significance in the economy has progressively increased. However, from its early days until the mid-1980s for two-wheelers and LCVs, and until the early 1990s for passenger cars, the focus of development of the automotive industry has been on import substitution. The current low penetration levels in India in all three segments of the industry, namely commercial vehicles, passenger cars and two wheelers and under-exploitation of the potential of this industry to foster. The growth of the economy have resulted in the auto industry contributing a relatively low (nearly 5 per cent) share of industrial output in India compared to the 8-10 per cent range in other developing countries such as Mexico and Brazil and much higher (15-17 per cent range) in developed countries such as the United States and Germany.



Even the share of employment is low at 2.5 per cent for the auto industry in India compared to 3-7 per cent in developing countries and around 15 per cent in mature economies. The economic liberalization that dawned in India in the year 1991 has succeeded in bringing about a sustained growth in the automotive production sector triggered by enhanced competitiveness and relaxed restrictions prevailing in the India soil. A number of Indian automobile manufacturers including Tata Motors, Maruti Suzuki, Mahindra and Mahindra, and TVS motors have dramatically and internationally to attain its rightful place in the world trade. A global recession for last two year notwithstanding, the industry has shown appreciable resilience and adjusted to the challenges of the environment.

FACTORS ABOUT THE AUTOMOBILE INDUSTRY

- The first automobile in India rolled in 1897 in Bombay.
- India is being recognized as potential emerging auto market.
- Foreign players are adding to their investments in India auto industry.
- Within two-wheelers, motorcycles contribute 80% of the segment size.
- Unlike the USA, the Indian passenger vehicle market is dominated by cars (79%).
- Tata Motors dominates over 60% of the Indian commercial vehicle market.

AMBAL AUTO

Ambal Auto, one of the leading Maruti dealer networks in the country has entered their 15th Year which stands a testimony for the status of Ambal in the Automobile segment. Right from the inception in 1998, Ambal Auto's prime focus was on building better relationships with the customers. "What helps us move ahead is the idea of looking at things from the customer's angle.

That way, there is little chance of making a wrong move," says Asokan Muthuswamy, Managing Director of Ambal Auto. This vision definitely reflects in their work culture, especially when it comes to after-sale service. The Ambal Auto network consists of a showroom, 3 workshops, a TrueValue outlet (meant to sell, buy and exchange used Maruti cars) and 2 Maruti Driving Schools in Coimbatore, showroom cum service centre in Erode, service centre in Ooty, Sales information centre in Coonoor & Gudalur and each showroom cum service centre in Namakkal, Dharapuram, Gobichettipalayam & Thiruchengod.

There are more than 600 employees whose dedicated efforts have made Ambal Auto one of the

best establishments in this region. The number of cars sold has exceeded 42000.

STATEMENT OF THE PROBLEM

This study develops and tests a conceptual framework relating after sales service in TVS two wheeler urban marketing activities. Specifically, the study tests the relationship between the customer and service provider in the company. This study also offerings the market competition towards relative products quality and market power in the urban distribution channel. Result generally support the brand loyalty of the products and originality of spare parts. The after sales service found to enhance consumer perception of product quality and quality of the service.

Customers support following the purchase of a products or service. In some cases, after-sales service can be almost as important as the initial purchases. The manufacturer, retailer, or service provider determines what is included in any warranty (or guarantee) package. This will include the duration of the warranty traditional one year from the date of purchase, but increasingly two or more years-maintenance and replacement policy, items included, labour cost, and speed of response.

OBJECTIVES OF THE STUDY

- To know the customer satisfaction about the safety and comfort provided by ambal auto.
- To know the customer relationship management and customer satisfaction toward service provided by ambal auto.
- To provided suggestion in improving the customer satisfaction and the company sales and profitability

METHODOLOGY OF THE STUDY

This chapter aims to understand the research methodology establishing a framework of evaluation and reevaluation of primary and secondary research. the techniques and concept used during primary research in order to arrive at finding; which are also death to a logical deduction toward the analysis and result

SAMPLE SIZE

The sample unit is any field of inquiry constitutes 155 respondents. with the information of those respondents, the analysis was done in percentages; mean score value method of calculation.

DATA COLLECTION

Data was collected to both primary and secondary data source. Primary data was collected through questionnaire. The study was done in the form of direct personal interviews.

**Primary data**

The primary data is data which is was collected for the first time for the particular interest to collect more information . In this study , the secondary data was collected from studies , journals and websites.

Secondary data

Secondary data consists of information that already exists somewhere , having been collected for some other purpose. In this study, the secondary data was collected from studies, journals, websites.

TOOLS USED FOR ANALYSIS

The rules of statistics in research is to function as a tools in designing research , analysis the data, drawing its conclusion from most research studies result in large volume of raw data that must be suitable reduce so that the same can be read easily and can be used for future analysis. The tools used are

- Simple percentage
- Weighted average analysis
- Chi-Square Test

REVIEW OF LITERATURE

Mandeep Kaur et al (2012)¹⁴ made Study on Factors Influencing Buying Behavior of Maruti Car Market.” The study aimed to find out the important features considered by the buyers while going for the purchase of a new car. The population of the study

covers the owners of maruti cars major cities of Punjab and Chandigarh. The study concluded that the respondents remarksafety and comfort as the most important features of the maruti car followed by luxury. It has been also suggested that the manufacturers must design the product giving maximum weightage to these factors.

Suresh et al (2012)¹⁵ made an attempt to measure the customer satisfaction with small cars in Bangalore city. In this study, the customer satisfaction was measured by using many variables. They are after sales service, ability to understand customer needs, behaviour and knowledge of the mechanics, warranty, prompt delivery, 24 hours customer care, information about the cars, horse power, engine capacity, power steering, technology, fuel capacity, acceleration, easy finance, convenience and accessibility, ground clearance, easy processing and documentation, price, discount and rebates, fuel efficiency, maintenance cost, luggage capacity, safety measures, model and color of the car, music accessories, engine pickup, availability of spares, cost of labour and spares. It has been identified from the research that sales support, vehicle design, purchase support, cost of ownership and delight features are the underlying factors that have satisfied the customers.

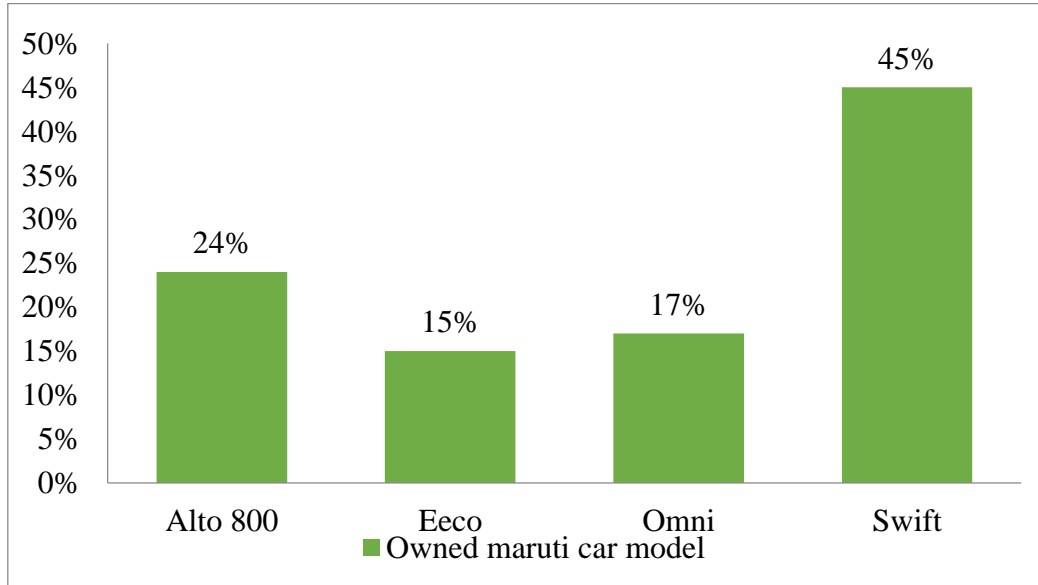
SIMPLE PERCENTAGE ANALYSIS**OWNED MARUTI CAR MODEL OF THE RESPONDENTS**

S.No	Owned maruti car model	Number of Respondents	Percentage (%)
1	Alto 800	37	24
2	Eeco	23	15
3	Omni	26	17
4	Swift	69	45
	Total	155	100

Source: Questionnaire



OWNED MARUTI CAR MODEL OF THE RESPONDENTS



WEIGHTED AVERAGE ANALYSIS

FACTORS INFLUENCED WHILE YOU PURCHASING CAR

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
Price	24	77	24	30	0	155	37.33
	120	308	72	60	0	560	
Fuel economy	40	41	40	22	12	155	36.00
	200	164	120	44	12	540	
Driving comfort	16	55	35	28	21	155	32.13
	80	220	105	56	21	482	
Maintenance cost	33	47	34	41	0	155	35.80
	165	188	102	82	0	537	
Attractive model	40	62	40	11	2	155	39.47
	200	248	120	22	2	592	
Availability of spare parts	66	32	33	24	0	155	40.33
	330	128	99	48	0	605	
After sales Service	66	21	44	18	6	155	39.20
	330	84	132	36	6	588	
Internal space	47	48	47	13	0	155	39.60
	235	192	141	26	0	594	
Pick up	56	28	54	14	3	155	39.00
	280	112	162	28	3	585	
Road grip	46	55	23	20	11	155	38.00

INTERPRETATION

The above table shows the various factors influenced while you purchasing car. The highest mean score rise 40.33 for the Availability of spare parts.

CHI-SQUARE TEST

Null Hypothesis (Ho)

There is no significant relationship between influence to choose ambal auto and overall opinion.

Alternative Hypothesis (Ha)

There is significant relationship between influence to choose ambal auto and overall opinion.



Opinion Influence	Excellent Poor	Very good	Good	Average	Poor	Total
Self made	2	10	0	1	0	13
Friend's recommendation	11	41	14	1	0	67
Dealer's approach	2	9	24	1	0	36
Family members	0	10	10	2	1	23
Others	0	10	4	2	0	16
Total	15	80	52	7	1	155

The table value showing chi-square analysis:

Calculated Value	Table Value	Degree of freedom	Level of significance	Result
84.39	26.30	16	5%	Rejected

The table 4.21 deals with the calculated value of (26.30) is less than table value (84.39) so the hypothesis is rejected. Hence it can be concluded that there is significant relationship between influence to choose ambal auto and overall opinion.

CONCLUSION

It has been observed that most customers are satisfied with pre sales services similarly most of these customers are dissatisfied with the post sales service which is the matter of concern for the company. Maruti cars need to improve some parts of cars specifically the interiors. High customer satisfaction level helps the company to retain its existing customer as well as generate new customer through word to mouth publicity. Most of the customers are satisfied with the maruti cars.

Customers feel that maruti cars have variety of brands available in various departments and also feel that buying with maruti cars is convenient and saves their valuable time. This is due to the proper facility that is available in maruti cars. The customers are very loyal towards maruti cars; hence they want to visit maruti car showroom again and say that they definitely like to visit maruti cars showroom again. This shows that customers are satisfied with their service while buying at maruti cars in ambal auto. Hence sales and service at ambal auto is good.

REFERENCES

1. Mandeep Kaur and Sandhu H.S., A Study on Factors Influencing Buying Behaviour of Maruti Car Market, *Indian Journal of Marketing*, Volume 8, Issue No:2, July December 2012, pp. 69.
2. Suresh A.M. and Raja K.G., Measuring customer satisfaction for small Cars: An empirical study, *Indian Journal of Marketing*, February, pp. 38.
3. Kaushik.V.K. and Neeraj Kaushik, Buying Behaviour of Maruti Cars: A Study in South West Haryana, *Indian Journal of Marketing*, Volume XXXVIII, No: 5, May 2011, pp.343
4. Sheetal B. Sachdev and Harsh V. Verma, Relative importance of service quality dimensions: A Multi sectoral study, *Journal of Services Research*, Volume 4, Number 1, April September 2014, pp.1115.



A COMPARATIVE STUDY ON CUSTOMER SATISFACTION BETWEEN JIO AND BSNL SERVICE PROVIDER WITH REFERENCE TO AVINASHI

Vishnu Prakash.A¹, Mr. M.A.Prasad²

¹Student, Dr. N.G.P Arts and Science College, Coimbatore.

²Assistant Professor (SG), Dr. N.G.P Arts And Science College, Coimbatore-048.

ABSTRACT

Reliance Jio Infocomm Limited, doing business as Jio, is an Indian telecommunications company and a subsidiary of Jio Platforms, headquartered in Mumbai, Maharashtra, India. It operates a national LTE network with coverage across all 22 telecom circles. It does not offer 2G or 3G service, and instead uses only voice over LTE to provide voice service on its 4G network. India and the third largest mobile network operator in the world with over 41.08 crore (410.8 million) subscribers.

Bharat Sanchar Nigam Limited d/b/a BSNL is an Indian government enterprise and a telecommunications service provider headquartered in New Delhi, India. It is under the ownership of Department of Telecommunications, Ministry of Communications, Government of India. It was incorporated on 1st October 2000 by the Government of India. The core idea of this paper is to know about the awareness about green marketing among the general public or consumer. This paper has taken to the present study on customer satisfaction between Jio and Bsnl in Avinashi city.

KEY WORDS: Jio, Bsnl, Network, Service provided

INTRODUCTION

In the today's competitive world communication plays a very important role. communication have become an integral part of the growth, success and efficiency of any business. This is the technology that gives a person the power to communicate anytime, anywhere. Due to advancement in technology, now communication becomes easy and faster. India's telecom sector has shown massive upsurge in the recent years in all respects of industrial growth. From the status of state monopoly with very limited growth, it has grown in to the level of an industry. Telephone, whether fixed landline or mobile, is an essential necessity for the people of India.

This changing phase was possible with the economic development that followed the process of structuring the economy in the capitalistic pattern. The stupendous growth of the telecommunication companies in India over the last fifteen years can be attributed to the liberal government of India, economic policy. Study special

emphasis has been laid over the comparative analysis of telecom companies Jio and BSNL by using primary sources of data in Coimbatore city. For the completion of efficient research work, descriptive and exploratory research design has been used which further conclude that BSNL is having weak performance as compared to Reliance Jio. Trends of previous 5 years in Coimbatore division have shown that BSNL company has slowly deteriorated its position. Mobile service providers will be benefited from the research, the ways to improve their quality of service.

SCOPE OF THE STUDY

- It would help us to know about which one is better (BSNL or Jio) according to the customer.
- Which company gives better service to their customers.
- It would help us to know about how many customers are loyal to their brands



- It would help us to know about the reasons regarding prefer service provider among BSNL and Jio.

OBJECTIVES OF THE STUDY

- To know the customer perception, choice and preference among BSNL and Jio mobile service.
- To study mobile service is preferred most by the customers?
- Comparative measurement of customer satisfaction level for BSNL and Jio services available in avinashi area.
- To understand the main problems faced by the customer while using the mobile services.
- To know the level of Customer Loyalty regarding his service provider & he is a switcher who switches over time to time due to various reasons.

LIMITATIONS OF THE STUDY

- Samples size is small and might not represent the whole population.
- The study is only within the Avinashi aera.
- Data today depend upon respondent's view, which could be bias in nature.
- Some of the respondent's hesitated to answer truly and frankly.
- The attitude of the customers is bound to change for time to time, the result of this study may not be universal.

REVIEW OF LITERATURE

Jones T.O and Sasser W. E (2019)

Stated that “Achieving Customer Satisfaction is the Main Goal for Most Service Firms Today”. Increasing customer satisfaction has been shown to directly affect companies’ market share, which leads to improved profits, positive recommendation, lower marketing expenditures and greatly impact the corporate image and survival.

Frequency Table Simple percentage

PREFERRED FEATURE

S.No	Source of awareness about Jio	Number of Respondents	Percentage (%)
1	Advertisement	19	13
2	Friends	33	22
3	Newspapers	54	36
4	Mouth publicity	44	29
	Total	150	100

Bryant et al. (2019)

Fonducted “crossing threshold” a study on 400 companies using the American Customer Satisfaction Index (ACSI) and demonstrated that there is significant relationship and consistent differences in the levels of satisfaction among demographic groups: Sex – positively related to satisfaction and female customers are more satisfied than the male customers. Female of all ages are more satisfied than the male. Women are more involved with the process of purchase and possibly use the mobile phone more for relational purposes (social network device) while men use it for functional purposes (businesses, sales, etc). Age – positively related to satisfaction but the relationship is not a straight line. Satisfaction increases with age. The major increase in satisfaction is seen within the age 55 and over. The higher the income has in lower the satisfaction level. Location (type of area) is also positively related to satisfaction.

Palvia and Palvia (2018)⁵

Found out that An examination of the IT Satisfaction of Small Business Users”, age is a significant determinant of satisfaction with information technology industry. In his research on customer satisfaction with airline services reported also that gender, occupation, education, and marital status have significant influence on customer satisfaction, while age and household income had no significant influence.

Tools For Analysis

The tools used for analysis are

- Simple percentage analysis.
- Chi-square test
- Simple average
- Weighted average
- Rank analysis



The above table shows that 13% of the respondents say advertisement, 22% of the respondents say friends, 36% of the respondents say newspapers and 29% of the respondents say Mouth publicity.

Majority 36% of the respondents are saying newspaper.

OCCUPATIONAL STATUS?

S.No	Occupational status	Number of Respondents	Percentage (%)
1	Employed	71	47
2	Student	13	9
3	Professional	24	16
4	Business	42	28
	Total	150	100

It is observed from the above table that 9 % of the respondents are student, 16% of the respondents are professional, 28% of the respondent are business.

Majority 47% of the respondents are Employed.

Simple Average

IMPORTANT FACTOR?

S.No	Reason to prefer jio	Number of Respondents	Simple average
1	Attractive plans	55	0.36
2	Network coverage	32	0.21
3	Easy availability	44	0.29
4	Good customer support	19	0.12
	Total	150	0.98

It is observed from the above table that 0.21- of the respondents says network coverage, 0.29- of the respondents says easy availability, 0.12 – of the respondent says good customer support.

Majority 0.36- of the respondents says attractive plans.

Rank Analysis

RANK THE ATTRIBUTES THAT ATTRACT CUSTOMER TOWARDS MOBILE

FACTORS	8	7	6	5	4	3	2	1	TOTAL	RANK
Cheaper call rates	67	17	17	11	6	11	15	6	905	6
	536	119	102	55	24	33	30	6		
Network coverage	71	14	8	11	13	12	15	6	893	7
	568	98	48	55	52	36	30	6		
Network congestion/uptime	84	11	17	11	10	5	6	6	979	3
	672	77	102	55	40	15	12	6		
Roaming	72	19	8	9	21	0	15	6	922	4
	576	133	48	45	84	0	30	6		
Good advertisements	84	21	6	17	10	4	4	4	1013	2
	672	147	36	85	40	12	8	13		
High speed 4G	63	21	12	31	0	2	15	6	920	5
	504	147	72	155	0	6	30	6		
Value added services	92	21	15	12	4	3	2	1	1063	1
	736	147	90	60	16	9	4	1		
Add on card/CUG facilities	12	71	14	15	11	17	3	7	860	8
	96	497	84	75	44	51	6	7		



The above table result it is found that Good advertisements as 2, Network congestion/uptime as 3, Roaming as 4, High speed 4G as 5, Cheaper call rates as 6, Network coverage as 7 and Add on card/CUG facilities as 8.

Weighted Average**FACTORS THAT ATTRACT MORE CUSTOMERS TOWARDS JIO COMPARE TO BSNL**

Service	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean score	Mean
Good network coverage	160	336	72	20	0	588	39.20
High speed Internet	120	192	120	26	25	483	32.20
Good tariff plan	55	220	192	40	0	507	33.80
Good customer support	125	336	72	34	0	567	37.80
Good offers	310	192	81	26	0	609	40.60

It is observed from the above table that 39.20 - of the respondents says good network coverage, 32.20 - of the respondents says high speed internet, 33.80 - of the respondents says good tariff plan, 37.80 - of the respondents says good customer support.

The highest mean score is that 40.60- of the respondents says good offers.

Majority of them said Value added services as a rank 1.

CHI SQUARE Analysis

Chi- Square Test - ANALYSIS BETWEEN SOURCE OF AWARENESS AND ATTRACTING SERVICE
NULL HYPOTHESIS (H0):

There is no significant relationship between source of awareness and attracting service.

ALTERNATIVE HYPOTHESIS (H1):

There is a significant relationship between source of awareness and attracting service.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.551 ^a	8	.006
Likelihood Ratio	22.160	8	.005
Linear-by-Linear Association	4.485	1	.034
N of Valid Cases	150		

It is clear from the above tale show that, the calculated value of chi-square is less than the table value. Hence the hypothesis is accepted which states that there is no significant difference between source of awareness and attracting service.

FINDINGS, SUGGESTIONS AND CONCLUSION**Finding of the Study****Simple Percentage Analysis**

- Here mostly 44% of the respondent's age is 21 to 30 years.
- Here majority 54% of the respondents were male.

- Here mostly 47% of the respondents were employees.
- Here majority 53% of the respondents were unmarried.
- Here mostly 39% of the respondents education level is Under graduate.
- Here mostly 44% of the respondent's income is Rs. 10001 – 20000.
- Here mostly 35% of the respondents have 6 to 7 members in their family.
- Here mostly 44% of the respondents using more than 1 year.
- Here mostly 36% of the respondents aware through newspaper.



- Here majority 51% of the respondents were spending Rs.50 weekly.
- Here mostly 51% of the respondents use GPRS service.
- Here mostly 44% of the respondents were convinced about schemes.
- Here mostly 58% of the respondents say unlimited data service.
- Here majority 52% of the respondents say internet service is reason to use Jio service.
- Here mostly 44% of the respondents say customization of usage plans.
- Here majority 52% of the of the respondents visit BSNL service center monthly.
- Here majority 51% of the respondents say Education.
- Here majority 61% of the respondents say Internet facility.
- Here majority 55% of the respondents say Customer support as a main problem.
- Here mostly 37% of the respondents say attractive plans.
- There is no significant difference between source of awareness and attracting service.
- Companies should also start promotional schemes for the customer.
- To attracts the customer the firms should improve there services by introducing latest technology in the market. & they should also try to increase the range of there signals in the city.
- The companies should try to increase there capacity to solve the connectivity problem.
- The marketing personnel should give complete feedback with logical rejoining from the market to increase service standards.
- For a particular order particular person should be made responsible not a group as a whole this will increase the commitment of that person towards the work and would make him feel more responsible towards an order.
- Marketing people should be given incentives for each order they bring to the company. It could be a fix percentage.
- The local persons are appointed more in the field of marketing to attracts the customer.

Simple Average Analysis

- Majority 0.21- of the respondents says network coverage,
- Majority 0.29- of the respondents says easy availability,
- Majority 0.12 – of the respondent says good customer support.
- Majority 0.36- of the respondents says attractive plans

Rank Analysis

- Majority of them said Good offers as a rank 1.
- Majority of them said Value added services as a rank 11.

Chi-Square Analysis

- There is no significant relationship between source of awareness and attracting service.
- There is a significant relationship between source of awareness and attracting service.

SUGGESTIONS

- Company should encourage to solve the customer complaint customer satisfaction should be the ultimate aim of the organization so customer complaints should be removed.
- Promotion by local advertisement & on electronic media more as to print media as it is the biggest media to reach common customer.

CONCLUSION

This study is to compare the two biggest competitors in all time in the telecom sector. In this research we find that the both Jio and BSNL are the well-established companies in the market. Customers are aware about the name of both the companies. They prefer to buy both. Jio is the more popular than the BSNL. Jio is preferred by the every class and it established it self as a better quality and better service provider than its competitors. Last but not the least, we can say that the both the Jio and the BSNL are going equally to the customer and they choose and at the time of purchasing. The result is that the Jio is better than the BSNL in the Avinashi area. The customers in Avinashi think that the connectivity and network of Jio is good than the BSNL.



A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS SOFT DRINKS SPECIAL REFERENCE WITH COCO COLA IN TIRUPUR CITY

Sathya . M¹, Mr. M .R .Chandra Sekar²

¹Student, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

²Assistant Professor, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

ABSTRACT

This study is to identify the customer preference and customer satisfaction level and the problems faced by the respondents while drinking coco cola . The data has been collected from 135 customers in Tirupur city by applying convenient sampling technique. Statistical tools such as percentage analysis , chi-square analysis and weighted score analysis have been used to analyse the data. The study has attempted to cast light on the preference of the customers also this study has necessitated the coco cola company to increase the awareness about its different varieties of products which are high in quality when compared to others brands.

KEY WORDS: *Coco cola, Customer satisfaction, Awareness, Preference.*

INTRODUCTION

Customer satisfaction has been subjects of the great interest to the organizations and researcher a like . The prime objective of organizations is to maximize profits and to minimize cost. Profit maximization can be obtained through increase in sales with lesser costs. Profit maximization can be obtained through increase in sales with lesser costs. One of the important factors that can help to increase sales is customer satisfaction, because satisfaction leads to customer loyalty, recommendations and repeat purchasing. A customer is an individual or business that purchases the goods or services produced by a business. Attracting customer is the primary goal of the businesses, because it is the customer who creates for goods and services.

The Coca-Cola Company is the largest drink company in the world, serving customers from more than 200 countries with over 500 different brands. Although it is clear that Coca-Cola is best known for Coca-Cola, its total range covers both sparkling and still drives and its 14 billion dollar portfolio include both globally known and localised brands.

The Coca-Cola Company has on occasion introduced other cola drinks under the Coke name. The most common of these is Diet Coke, along with others including Caffeine-Free Coca-Cola, Diet Coke Caffeine-Free, Coca-Cola Zero Sugar, Coca-Cola Cherry, Coca-Cola Vanilla, and special versions with lemon, lime, and coffee. Coca-Cola was called Coca-Cola Classic from July 1985 to 2009, to distinguish it from "New Coke". Based on Inter brand's "best global brand" study of 2015, Coca-Cola was the world's third most valuable brand, after Apple and Google. In 2013, Coke products were sold in over 200 countries worldwide, with consumers drinking more than 1.8 billion company beverage servings each day. Coca-Cola ranked No. 87 in the 2018 Fortune 500 list of the largest United States corporations by total revenue.

CONSUMER PREFERENCES

Consumer preferences is used primarily to mean to select an option that has the greatest anticipated value among a number of options by the consumer in order to satisfy his/her needs or desires. Preferences



indicate choices among neutral or more valued options available. The preference of the consumer is the result of their behaviour they show during searching, purchasing and disposing the products. Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. They permit the consumer to rank these bundles of goods according to the levels of utility they give the consumer. The preferences are independent of income and prices. Ability to purchase goods does not determine a consumer's likes or dislikes.

STATEMENT OF THE PROBLEM

The Coca-Cola Company is an American multinational beverage corporation incorporated under Delaware's General Corporation Law. The present study focused on customer preferences and satisfaction towards coca cola products. Hence the statement of the problem is coca cola is facing major challenges as revenue and soda sales drop due to the changes in customers taste to less sugary drinks and healthy brands.

Coco cola contains high amounts of sugar sweetened beverages such as soda can have various adverse impacts on your health. These range increased from chances of tooth decay to a higher risk of heart disease and metabolic disorders like type 2 diabetes. Coco cola company have not concentrated on the health of the consumers.

SCOPE OF THE STUDY

In this competitive modern age where different qualities and types of goods exist branding is given special importance in the business world not only giving separate identity but also easy recognition to the product and so also creates a special brand preference.

Customer satisfaction covers all the areas of importance to consumers which in turn helps the company in preparing strategies for a well built and improved customer satisfaction for the product of the company. The subject is studied for the improvement of the product in view of the limitations of the study, which will help me in acquiring a better insight and understanding the trivial aspects of the customer satisfaction.

OBJECTIVES OF THE STUDY

- To study consumer opinion on price and package of coca cola products.
- To analyze the awareness of consumer regarding coca cola.
- To examine the problem faced by the customer using coca cola.

- To find out the satisfaction level of the customer.

RESEARCH DESIGN

The research design is the blueprint for the fulfilment of objectives and answering questions. It is a master plan specifying the method and procedures for collecting and analysing needed information.

DATA COLLECTION

The source of data includes primary and secondary data sources.

PRIMARY DATA

A primary data is a data which is collected for first time for the particular interest to collect more information. In this study, the primary data was collected using questionnaire.

SECONDARY DATA

Secondary data consist of information that already exists somewhere, having been collected for some other purpose. In this study, the secondary data was collected from studies, magazines, journals and websites.

SAMPLE DESIGN

Sample design is definite plan determine before any data is actually obtaining for a sample from a given population. The researcher must decide the way of selecting a sample. Samples can be either probability samples or non-probability samples.

SAMPLE SIZE

The sample size selected for this study is 135 respondents.

PERIOD OF THE STUDY

The study was conducted for the period of four months. The primary data was collected and it took one month time period. The review of literature and discussions with the field experts in the species board took another one month. Data analysis and interpretation was carried for a period of one month and final period of the report took the remaining period.

LIMITATION OF THE STUDY

- Time is a major limitation, extensive study was not possible mainly due to time constrain.
- The study is confined to Tirupur city only
- The sample size taken for the study is limited only to 135 respondents.
- The respondents views and opinions may hold goods for the time being and may vary.



TOOLS USED FOR THE STUDY

The collected data were analyzed and interpreted properly to find the results of the research work. Conventional tools like descriptive tables and percentage were used for the purpose of analysis. The graph and charts have also been made use of where ever necessary. Further, the following specific tools were used,

- Simple percentage analysis
- Weighted average analysis
- Chi-square analysis

REVIEW OF LITERATURE

Abhay Goyal, et.al(2019) conducted a study on enhancing consumer preference towards soft drinks. The study aims to analyze the Indian consumer behaviour trends and their current purchase patterns of fruit based beverages. The study indicated that the intrinsic psychological factors can influence a consumer's preference towards purchase of soft drink products.

Naufal Iza Aberdeen, et.al(2016) conducted a study of carbonated drink brand awareness and image on consumer perceived quality and purchase intension. The two carbonated drink brands were investigated, ie, Coca cola and Big cola. The results shows that Coca cola and Big cola carbonated drinks shows that brand awareness, brand image and perceived quality directly affects the consumer purchase intention.

COMPANY PROFILE

Coco-Cola, the product that has given the world its best-known taste was born in Atlanta, Georgia, on May 8, 1886. Coco-Cola Company is the world's leading manufacturer, marketer and distributor of non-alcoholic beverage concentrates and syrups, used to produce nearly 400 beverage brands. It sells beverage concentrates and syrups to bottling and canning operators, distributors, fountain retailers and fountain wholesalers. The Company's beverage products comprises of bottled and canned soft drinks as well as

concentrates, syrups and not-ready-to-drink powder products. In addition to this, it also produces and markets sports drinks, tea and coffee. The Coca-Cola Company began building its global network in the 1920s. Now operating in more than 200 countries and producing nearly 400 brands, the Coco-Cola system has successfully applied a simple formula on a global scale: "Provide a moment of refreshment for a small amount of money- billion times a day."

MISSION

Our Roadmap starts with our mission, which is enduring. It declares our purpose as a company and serves as the standard against which we weigh our actions and decisions.

- ❖ To refresh the world.
- ❖ To inspire moments of optimism and happiness.
- ❖ To create value and make a difference.

VISION

Our vision serves as the framework for our Roadmap and guides every aspect of our business by describing what we need to accomplish in order to continue achieving sustainable, quality growth.

- ❖ **People** : Be a great place to work where people are inspired to be the best they can be.
- ❖ **Portfolio**: Bring to the world a portfolio of quality beverage brands that anticipate and satisfy people's desires and needs.
- ❖ **Partners**: Nurture a winning network of customers and suppliers, together we create mutual, enduring value.
- ❖ **Planet** : Be a responsible citizen that makes a difference by helping build and support sustainable communities.
- ❖ **Profit** : Maximize long-term return to shareowners while being mindful of our overall responsibilities.
- ❖ **Productivity**: Be a highly effective, lean and fast-moving organization.



**SIMPLE PERCENTAGE ANALYSIS
REASON FOR PREFERRING THE COCO COLA PRODUCT**

S.NO	REASON	NO.OF RESPONDENTS	PERCENTAGE
1	Good taste	33	24.4%
2	Easily available	48	35.6%
3	Lot of varieties	26	19.3%
4	All the above	28	20.7%
	TOTAL	135	100%

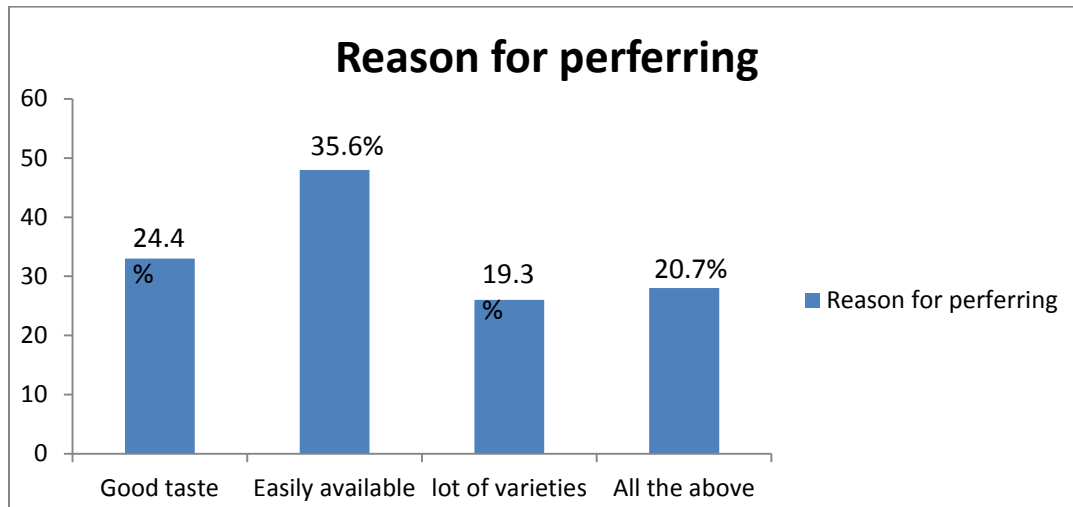
Source: Questionnaire

INTERPRETATION

The above table reveals the reasons for preferring the coco cola product. 24.4% of the respondents are preferring coco cola product because of good taste, 35.6% of the respondents are preferring coco cola product because of easily available, 19.3% of the respondents are preferring coco cola product because of

lot of varieties 20.7% of the respondents are preferring coco cola product because all the above factors.

Majority (35.6%) of the respondents are preferring the coco cola products because of easily available.



WEIGHTED AVRERAGE ANALYSIS

**SATISFICATION LEVEL TOWARDS SERVICE PROVIDED BY
COCO COLA**

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
Price	60 300	45 180	24 72	2 4	4 4	135 560	4.14
Quality	13 65	66 264	46 138	8 16	2 2	135 485	3.59
Taste	25 125	44 176	55 165	9 18	2 2	135 486	3.6
Packing	18 90	60 240	39 117	15 30	3 3	135 480	3.55
Availability in all shops	25 125	53 212	38 114	8 16	11 11	135 478	3.54

**INTERPRETATION**

The above table shows the various satisfaction level towards service provided by coco cola .The highest mean score rise 4.14 for the price.

CHI- SQUARE ANALYSIS

Annual income	Coco Cola Attracts					Total
	Price	Taste	Design	Popularity	Availability	
Below 20	2	12	13	9	4	40
21-30 years	7	24	21	20	11	83
30-40 years	0	3	1	6	1	11
Above 40 years	0	1	0	0	0	1
Total	9	40	35	35	16	135

To find out the association between Annual income and coco cola factors attracts by the respondents, chi-square test is used and result is given below.

HYPOYHESIS

There is no significant relationship between age of the respondents and coco cola attracted by the respondents.

Factor	Calculation	Df	Table Value	Remarks
Coco cola attracts	9.670 ^a	12	21.03	Rejected

INTERPRETATION

The calculated value of chi-square is less than the table value. Hence the hypothesis is rejected stating that there is significant relationship between age of the respondents and coco cola attracts by the respondents.

CONCLUSION

The research concludes that the democratic background of the consumer plays a vital role in determining the behavioural aspect as well as the royalty of brand. Consumers are able to realise the need of the product, limited awareness of the product, and suitable information sources of the product. They are able to collect maximum information of the product through television advertisements .They derive characteristics through their experience of the product and make careful study on the negative effect and quality of product. The consumer behaviour of the

population logically prefers the product, making the purchasing decision, and expressing the satisfaction level. The consumers have the tendencies brand shift if not satisfied with the utilisation of the product well as availability in the market. In the purchase satisfaction in consumers of predominant brand image and quality of the product is important. The royalty of consumer purpose is very high, so their strength and their expectation are also maximized.

REFERENCES

1. *Abhay Goyal, et.al "Enhancing consumer preference towards soft drinks", Great Lakes Institute of Management, Volume – 13, Issue – 1, Mar 2019.*
2. *Naufal Iza Aberdeen, et.al(2016) conducted a study of carbonated drink brand awareness and image on consumer perceived quality and purchase intension.*



ASSESSMENT OF INFORMATION TECHNOLOGY EMPLOYABILITY SKILLS AMONG BUSINESS EDUCATION STUDENTS IN TERTIARY INSTITUTIONS IN EKITI STATE, NIGERIA

**Akindahunsi, Yemisi Olajumoke¹, Dr. Haruna, Alhaji Jibrin²,
Malan, Patience Ukaiko³**

¹*Department of Business Education, Bamidele Olumilua University of Education, Science and
Technology Ikere, Ekiti State, Nigeria*

²*Department of Vocational and Technical Education, Federal University of Lafia, Nasarawa State,
Nigeria*

³*Department of Business Education, Federal College of Education, Pankshin, Plateau State, Nigeria*

ABSTRACT

The study examined the information technology employability skills of tertiary institutions Business Education students in Ekiti State. The descriptive survey research design was adopted for this study. The population was 500 Business Education students out of which 100 final year were sample using simple random sampling technique. A self-design 23-item questionnaire titled 'Information Technology Employability Skills of Business Education Students' was used to collect data for the study. The instrument was constructed on 4-point scale. The instrument was validated by two experts. The reliability of the instrument was established using split-half method and its coefficient was 0.79. The research questions raised were answered using mean scores and standard deviation and hypotheses formulated were tested using t-test and ANOVA at 0.05 level of significance. Any item with a mean score greater than or equal to 2.50 suggests agreed and any mean below 2.50 suggest disagreed. The study revealed that Business Education students in College of Education, Ikere Ekiti and University of Nigeria, Nsukka Ikere campus possessed information technology skills required for employability. The result further shows that there is significant difference between College of Education and University Business Education students in the possession of information technology skills. The study also revealed that there is a significant difference in information technological skills possessed by Business Education student based on the areas of specialization. The study concluded that Business Education students have required information technology skills for employability. The study therefore recommended that Business Education Department should be more equipped with information technology facilities to enable students acquire more Information technology skills before graduating and Business Education programme should be promoted by government and all stakeholders in the field of Education.

KEYWORDS: *Business Education, Information Technology, Employment, Employability, Skills.*



INTRODUCTION

According to Brown and Hesketh (2004) employability is the relative chances of getting and maintaining different kinds of employment. Employability not only depends on whether one is able to fulfill the requirements but also on how one stands relative to others within a hierarchy of job seekers. Kazilan (2009) opined that employability refers to a group of important skills instilled in each individual in order to produce productive workforce. According to Yorke (2008), graduates employability skills are personal set of understanding and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupation.

It has been a major concern of graduates what constitutes employability skills. This is because despite the cry of unemployment among graduates, employers of labour are complaining about the lack of availability of skilled workers. It seems that the skills possessed by graduates are different from what the employers want. In a study conducted by Dabalén and Oni (2000) as cited in Usoro (2010) discovered that graduates are poorly trained and unproductive on the job and that graduates have shortcomings in applied technical skills. Brown and Hesketh (2004) also stressed that there is a clear mismatch between individual's expectations of employability and the realities posed by the labour market.

Business Education is that aspect of the total education programme that provides the knowledge, skills, understanding and attitudes needed to perform in the business world as a producer and consumer of goods and services. Business education is a branch of vocation education which prepares students for the world of work (Arhueremu & Ojohwoh, 2013). It represents a broad and diverse discipline that is included in all types of education delivery system – elementary, secondary and post-secondary. Business education is education for and about business (Esene, 2012). It is training in business skills that will enable the students after graduating for university programme set-up their own businesses and run it successfully without failure (Okoro, 2013). Business Education includes education for office occupations, distributions and marketing occupations, accounting, business and teaching of entrepreneurial skills. Business education is a field of study that holds great promises of employment for its recipients. Nevertheless the graduates of business education have also been plagued with the woes of unemployment. They too, like their counterparts in other fields, are at lost regarding how to be gainfully employed despite the promises of employment offered to them by business education. It

seems that those promises and the contents of what they were taught in schools are different from what is obtainable in the reality of the world of work. They find it difficult either to get paid employment or to establish their own businesses.

It appears that gaining employment has become increasingly difficulty as a result of the fact there are new demands in the labour market than it used to be. Today information technology has changed the tone of the labour market. It appears that employers of labour are today desirous of job seekers who possess the electronic office skills as well as those who can effectively use office technology and gadgets to discharge office functions. Based on the importance and the role of information technology skills in all sectors of the economy, both at the national and at the global level, most employers now recruit applicants with information technology skills.

In view of Arhueremu and Ojohwoh (2013), explained information technology as the acquisition, processing, storage and disseminating of vocal, pictorial, textual and numerical information by micro-electronic based combination of computerizing and telecommunication. Information technologies are now influencing every aspect of human life. They play salient roles in work places, business, education, and even entertainment. Information technology has brought a lot of changes in working conditions. According to Oduma and Ile (2012), there is virtually no vacancy in today's modern offices that the knowledge of soft skills is not required. Electronic office competencies for business education graduates are very critical. Soft skills remain the fulcrum and the basis upon which their activities and discharge of their functions in organizational offices revolve. Employers of labour are today desirous of job seekers who possess the electronic office skills as well as those who can effectively use office technology and gadgets to discharge office functions. Information technologies are now influencing every aspect of human life. They play salient roles in work places, business, education, and even entertainment. Information technology has brought a lot of changes in working conditions.

Also, rapid advancement in Information Technology has produced major changes in the ways in which businesses operate. Almost all businesses today use computers in their day-to-day operations. With the use of computers, business is conducted in a way quite different from that in which it was conducted in the past. Transactions are no longer recorded using pen and paper but are store in electronic media. The updating of records and files is done through computer programs. Modern organizational practices have



broadened tremendously to include the challenging need of workers to adapt to the rapidly changing techniques, new equipment and work processes. In the past accountants spent several hours doing manual entries but that changed with the development of computer technology. This is why Oliver (2008) observed that since modern offices and organizations operate with and employ e-offices processes, only workers who possess electronic office operations skills will remain relevant.

It appears that the employability of business education graduates now depends a great deal of technology skills. In buttressing this point, Romney and Steinbart (2009) posited that an accountant has to know how to use the computer system and, more importantly, understand how transactions are recorded and updated to be able to ascertain the accuracy and reliability of the data. It is therefore important for business education students and graduates to possess information technology knowledge and skills relevant to their roles to provide competent and professional services. And thus it has become prerequisite for business education graduates to be knowledgeable in the use of information technology in order to gain employment and also maintain their employment.

Many graduates are without the required skills for them to get employed. They lack certain information technology skills which are required for gaining employments in today's world of technological advancement. These skills create a gap in their knowledge which should have been embedded in the curriculum used in the process of training them. Business education graduates by the nature of their programme ought to possess relevant information technology competencies for employability. They are supposed to be prepared with the right set of information technology skills in order to meet the needs of business organizations. Business education students should be trained to meet the market demands of their chosen occupations. The methods of instruction and the content of the curriculum should be looked into to find out if there are really developing in the recipients the prerequisite skills, knowledge and attitudes to be relevant and employable in a technologically dynamic society. However, research findings revealed that business education graduates are not competent in information technology skills (Ile & Okolocha, 2007).

As identified by literature the relevant information technology skills required of business education graduates include, among others the followings:

- Ability to make use of spreadsheets to perform accounting operations
- Ability to connect to the internet

- Ability to analyze data using computer
- Skills in using tele/video conferencing
- Ability to perform Cloud computing i.e. storing data online
- Ability to make use of word processing application software to input, retrieve and store information
- Ability to perform basic data processing
- Ability to key in data
- Ability to operate database to store data
- Ability to make use of e-mails to receive and send mails
- Ability to send and receive fax messages
- Ability to make use of power points for presentations
- Skills in the use of e-commerce to carry out business transactions online
- Ability to make use of e-business application to carry out e-banking
- Ability to make use of e-business application to carry out e-marketing
- Ability to browse the internet to retrieve information
- Ability to receive vocal messages using the internet
- Skills in the use of data security software to protect private information against unauthorized access. i.e. the use of passwords
- Skills in the use Telecommuting/tele-working
- Ability to conduct research using the internet
- Ability to key in figures in table, rows, columns, insert additional rows and delete where necessary
- Ability to identify cells, arrange, re-arrange, name or rename a cell
- Ability to cut, paste, save and retrieve information using the word processing package (Ohakwe, 2003; Chukwumezie, 2003; Olise & Ihimekpen, 2008; Okoro, 2013).

This study therefore seeks to determine the extent to which tertiary business education students possessed information technology skills required for employability. The study also determines the relationship between business education curriculum content and the information technology skills required for employment.

THEORETICAL FRAMEWORK

This study is anchored on human capital theory and job matching theory as its theoretical underpinning. The Human Capital Theory as cited by Becker (1994) argues that workers with higher skill levels receive higher compensation because they are more productive. Employee involvement may require workers with more general skills to perform more



complex tasks, which might result in more rigorous selection and hiring criteria and increase the demand for and wages of more educated workers. New practices may also require more firm-specific skills, which would increase employer-provided training and wages as well.

Another theory adopted in this study was job-matching theory that argues that the main goal of education and training is to prepare graduates for the tasks they are going to perform on their jobs. The theory suggests that a mismatch between the required skills and the skills a graduate actually possesses has important consequences for productivity, wages and probability of getting a job. Therefore, the competency level required by employers must be equivalent with the competency level of the graduates. The required specialization for the job should be match to graduates' field of specialization. Job match also can be identified by the degree to which graduates are able to utilize the knowledge, skills and attitudes to the work context (Bernard, Veldhuis & Rooij, 2001).

This theory is used in the study as Business Education students should acquire appropriate and relevant trainings in preparation for their future employment after graduation. Employers will screen the applicants qualifications and chose them if they match the available jobs. Furthermore, employers will choose the most suitable candidates to avoid any expensive training cost later and probably the most suitable candidates chosen will be paid higher than the group without matching skills.

PURPOSE OF THE STUDY

This study aims to determine:

- (1) The information technology skills required by Business Education Students for employment
- (2) The extent to which Business Education Students possessed the required information technology skills for employment
- (3) The difference between NCE and B.Ed Business Education Students in their possessed information technology skills
- (4) The difference in the possessed information technology skills of Business Education Students among the different areas of specialization in Business Education

RESEARCH QUESTIONS

The following research questions were raised for the purpose of this study:

- (1) What are the information technology skills required by Business Education Students for employment?

- (2) To what extent do students of Business Education possess the required information technology skills required for employment?
- (3) The difference between NCE and B.Ed Business Education students in their possessed information technology skills
- (4) Does area of specialization influence the information technology employability skills possessed by Business Education students in Ekiti State

HYPOTHESES

The following hypotheses were formulated for this study:

- (1) There is no significant difference between NCE and B.Ed Business Education students in their possessed information technology skills
- (2) There is no significant difference in the possessed information technological skills of students among the areas of specialization in the Business Education programme.

SIGNIFICANCE OF THE STUDY

This study will contribute to knowledge in the area of information technology skills requires for employability of Business Education students in the era of technological advancement. Curriculum planners could make use of the findings of this study in designing the kind of curriculum that will prepare business education graduates for employment in the era of technological advancement. Information obtained can have impact on curriculum development and improve teaching and learning of Business Education by making it more relevant in the era of information technology.

METHODOLOGY

Descriptive survey design was adopted for this study. The population consisted of 500 Business Education Students in Colleges of Education and Universities respectively. The sample consisted of final year business education students of College of Education, Ikere-Ekiti and University of Nigeria, Nsukka, Ikere Campus. Simple random sampling technique was used to select 100 students from the different areas of specialization in Business Education, Accounting and Office Technology and Management. A questionnaire titled 'Information Technology Employability Skills of Business Education Students' was used to collect data for the study. The questionnaire was tested for reliability using split-half method and its coefficient was 0.79 which implies that the instrument was highly reliable. Four research



questions were raised to guide the study and two hypotheses were formulated. The data collected were analysed using mean, standard deviation, t-test and Analysis of variance ANOVA at 0.05 level of significance.

DATA ANALYSIS AND RESULTS

Question 1: What are the information technology skills required by business education students for employment?

Table 1: Information Technology skills required by business education students for employment

S/ N	ITEMS	Mean	St.D	Decision
1	Ability to make use of spreadsheets to perform accounting operations	3.04	0.85	Agreed
2	Ability to connect to the internet	3.36	0.79	Agreed
3	Ability to analyze data using computer	2.83	0.98	Agreed
4	Skills in using tele/video conferencing	2.56	1.08	Agreed
5	Ability to perform Cloud computing i.e. storing data online	2.57	0.95	Agreed
6	Ability to make use of word processing application software to input, retrieve and store information	3.01	1.03	Agreed
7	Ability to perform basic data processing	2.72	0.94	Agreed
8	Ability to key in data	2.60	0.94	Agreed
9	Ability to operate database to store data	2.61	0.96	Agreed
10	Ability to make use of e-mails to receive and send mails	2.86	1.03	Agreed
11	Ability to send and receive fax messages	2.72	1.01	Agreed
12	Ability to make use of power points for presentations	2.66	1.02	Agreed
13	Skills in the use of e-commerce to carry out business transactions online	2.49	1.03	Disagreed
14	Ability to make use of e-business application to carry out e-banking	2.45	1.04	Disagreed
15	Ability to make use of e-business application to carry out e-marketing	2.51	1.08	Agreed
16	Ability to browse the internet to retrieve information	2.95	1.03	Agreed
17	Ability to receive vocal messages using the internet	2.96	0.98	Agreed
18	Skills in the use of data security software to protect private information against unauthorized access. i.e. the use of passwords	2.74	1.06	Agreed
19	Skills in the use Telecommuting/tele-working	2.52	0.99	Agreed
20	Ability to conduct research using the internet	2.97	1.03	Agreed
21	Ability to key in figures in table, rows, columns, insert additional rows and delete where necessary	2.83	1.01	Agreed
22	Ability to identify cells, arrange, re-arrange, name or rename a cell	2.88	0.91	Agreed
23	Ability to cut, paste, save and retrieve information using the word processing package	3.24	0.92	Agreed
	Grand mean	2.79	0.99	Agreed

$\bar{X} \leq 2.50$ indicate Agreed otherwise "Disagreed"

The result presented in Table 1 revealed the necessary Information Technology skills required by

business education students for employment. The mean responses in the table for item 1-12, 15-23 are greater



than 2.50. This indicated that many of the respondents agreed that the identified skills are necessary Information Technology skills required by business education students for employment. These skills include ability to; use spreadsheets to perform accounting operations, analyze data using computer, perform Cloud computing i.e. storing data online, make use of word processing application software to input, retrieve and store information, perform basic data processing, make use of e-business application to carry out e-marketing, browse the internet to retrieve information, conduct research using the internet, use data security software to protect private information against unauthorized access, and ability to cut, paste, save and retrieve information using the word processing package. The grand mean further confirmed that all the skills identified in the table are necessary information technology skills to possess by business education students in tertiary institutions.

Research Question 2: To what extent does students possessed the required information technology skills for employment in Business Education?

In analyzing the question, responses in the questionnaire on information technology skills for employment in Business Education were computed. To determine the extent in which students of business education possessed information technology skills for employment, the respondents were categorised into “high” and “low” extent. In the questionnaire, “High extent” was determined by adding the standard deviation to the mean ($2.79 + 0.99 = 3.78$) and “Low extent” was determined by subtracting standard deviation from the mean response ($2.79 - 0.99 = 1.80$).

The extent in which students of Business Education possessed information technology skills for employment is presented in Table 2 below.

Table 2: Summary of respondents on the extent to which students of business education possessed information technology skills for employment

Extent of ITS Possession	Frequency and Percentage
High	61 (61%)
Low	39 (39%)
Total	100 (100%)

Source: Field Survey, 2018

The result presented in Table 2 revealed that 61% of the students had high extent of information technology skills for employment and 39% had low extent of information technology skills. The number of those who possessed information technology skills in Business Education was high. The fact is that most

students of Business Education possessed information technology skills for employment after graduation.

Test of Hypothesis

Ho1: There is no significant difference between NCE and B.Ed Business Education students in their possessed information technology skills.

Table 3: t-test analysis of difference between NCE and B.Ed Business Education students in their possessed information technology skills

Students	N	Mean	Std. Dev	Df	T. Cal.	T. Table	Inference
B.Ed students	50	3.36	0.797	98	2.733	1.960	Significant
NCE students	50	3.04	0.851				

$P > 0.05$ (Significant)

The result of analysis presented in table 4 revealed that there is significant difference between NCE and B.Ed Business Education students in their possessed information technology skills as $t_{cal}(2.733)$ was greater than t_{tab} (1.960) at 0.05 level of

significance. This makes null hypothesis one to be rejected. This means that Degree (B.Ed) students possessed information technology skills than NCE students of Business Education.



Ho2: There is no significant difference in the possessed information technological skills of students among the areas of specialization in the Business Education programme.

Table 4: Analysis of variance ANOVA for difference between Area of specialization and the possession of information technological skills in Business Education

Source	Type III Sum of Squares	df	Mean Square	F- Cal	F -Table	Sig.
Corrected Model	2.442 ^a	2	1.221	1.707		.187
Intercept	878.562	1	878.562	1228.000		.000
Area of specialization	2.442	2	1.221	1.707	1.47	.187
Error	69.398	97	.715			
Total	996.000	100				
Corrected Total	71.840	99				

The result presented in table 4 above revealed the significant difference in the area of specialization and the possession of information technological skills in business education as F-cal (1.707) was greater than F-table 1.47 at 0.05 level of significance. This led to the rejection of hypothesis 3. This implies that there was significant difference between the area of

specialization and the possession of information technological skills in business education.

In order to know students' area of specialization that possessed the highest information technology skill, a post hoc test was further carried out.

Table 5: Scheffe post hoc test showing area of specialization that possessed the highest information technology skill

(I) AREA	(J) AREA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
BUS EDU	OTM	-.3475	.22578	.310	-.9088	.2138
	ACCT	-.3270	.19747	.259	-.8180	.1639
OTM	BUS EDU	.3475	.22578	.310	-.2138	.9088
	ACCT	.0205	.21273	.995	-.5084	.5493
ACCT	BUS EDU	.3270	.19747	.259	-.1639	.8180
	OTM	-.0205	.21273	.995	-.5493	.5084

Post hoc test in table 5 revealed that students who study OTM possessed the highest information technology skill as positive mean difference of 0.3475 and 0.0205 was observed against others disciplines. This was followed by Accounting and Business Education students.

DISCUSSION OF FINDINGS

The study revealed that business education students in Ekiti state are highly competent in the tested information technology skills required for employability. This proves that Business Education students in tertiary institutions in Ekiti state have developed high skills in information technology as a result of their study in Business Education. This means that there is a positive relationship between the Business Education curriculum content and information technology required for employability in today's labour market. This finding is contrast with the finding of Ile

and Okolocha (2007) who found out that business education graduates are not competent in information technology skills.

The study also revealed that there is no significant difference in the possessed information technology skills of male and female Business Education students. This means that both male and female business education students possessed information technology skills. The study further revealed that there is significant difference between NCE and B.Ed business education students in their possessed information technology. This means that Degree (B.Ed) students possessed information technology skills than NCE students of Business Education.

There is no significant difference in the possessed information technological skills of students among the areas of specialization in the business education programme. Through this study it was



revealed there is a significant difference among the areas of specialization in Business Education in their possessed information technological skills. This means that even though students in some areas of specializations are more skilled in information technology than others, all the areas of specialization in Business Education have high competency in information technology. This is in line with Arhueremu and Ojohwoh (2013) who found that Business Education is still that aspect of the total education programme that provides the knowledge, skills, understanding and attitudes needed to perform in the business world as a producer and consumer of goods and services even in the era of technological advancement. Business education still prepares students for the world of work.

CONCLUSION

The study concluded that the Business Education students used for the study have required information technology skills for employability and this means that there is positive relationship between the Business Education curriculum content and the information technology skills required for employability. However, they still need to be more trained and exposed to different information technology facilities in order to be able to compete favourably with their counterparts in the global market.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. Business Education departments in tertiary institution should be more equipped with information technology facilities to enable students acquire more IT skills before graduating
2. Training and exposure to information technology should be improved in all the areas of specialization that make up Business Education
3. Business Education should be promoted by government and all stakeholder as the kind of education that prepares students for the world of work even in the era of technological advancement

REFERENCES

1. Arhueremu, V. M. & Ojohwoh R. (2013). *Quality teaching method of ICT skills: Implications for business educators*. *Books of Readings* 3(1), 105-110
2. Becker, G. (1994). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: The University of Chicago Press.
3. Bernard, Y. F., Veldhuis, G. J., & Van Rooij J. C. G. M (2001). *Evaluation in practice: identifying factors for improving transfer of training in technical domains*. *Students Educational Evaluation*, 27: 2//69-290. Retrieved 2011 from http://www.medwelljournals.com/ful_ltext/doi=ibm.
4. Brown, P. & Hesketh, A. (2004). *The Mismanagement of Talent: Employability and Jobs in Knowledge Economy*. Oxford: Oxford University.
5. Chuwumezie, F U. (2003). *The internet competencies required of secretaries in a technological environment. Being a paper presented at the 2003 NABE National Conference held at the Rivers State University of Science and Technology. Porth Harcourt, Rivers State.*
6. Esene, R. A. (2012). *Methods of Teaching Vocational Business Subjects*. Agbor. Royal Pace Publications.
7. Kazilan, F. (2009). *Employability skills among the students of technical and vocational training centers in Malaysia*. *European Journal of Social Sciences*. 9(1): 147-160.
8. Oduma, C. A. & Ile, C. M. (2012). *Office Employability Competencies Needed*. *World Journal of Education* 5, (2)
9. Ohakwe, S. N. (2003) *Internet knowledge and skills standards required of national diploma secretarial graduates. Being a paper presented at the 2003 NABE National Conference held at the Rivers State University of Science and Technology. Port Harcourt, Rivers State.*
10. Okolocha, C.C. & Ile, M.C. (2007) *Meeting the personnel needs of the industrial sectors through business education: The views of private industrialists*. *Unizik Orient Journal of Education*. 3(1), 39-48
11. Okoro, J. & Okoro, P. E. (2009) *Information and Communication technology skills required of office education graduates as perceived by managers/supervisors*. *Delta Business Education Journal* 1(5), 147-158
12. Okoro, J. (2013) *Assessment of information and communication technology competencies possessed by university postgraduate business education students to handle entrepreneurship business challenges in Nigeria*. *Global Journal of Management and Business Research Administration and Management*. 13(8).
13. Olise, J. M. & Ihimekpen, F. A. (2008) *Comparison of secretarial studies regular and week-end NCE part II information and communication technology skills in colleges of education*. *Delta Business Education Journal*. 1(3), 195-199.
14. Oliver, Y. B. (2008). *Repositioning Business Education in a Changing Business Environment*.



Nigeria Journal of Education, 6(2), 144-157

<http://wje.sciedupress.com>

15. Romney, M. B. & Steinbart, P. J. (2009). *Accounting Information Systems. 14th Edn. New Jersey: Pearson-Prentice-Hall*
16. Usoro, E. B. (2010). *Developing human resources in tertiary business education for youth empowerment and national development in Nigeria. Journal of Education for National Development 2(1):*
17. Yorke, M. (2008). *Employability in Higher Education: What it is and what it is not. York: Higher Education Academy. ESECT*



EFFECTS OF ANTHROPOGENE POLLUTION ON URBAN ECOSYSTEM

**¹Misliddin Muhammadovich Khalmatov, ²Bokhodirkhodja
Sharibkhodjaevich Ismoilkhodjaev, ³Dilmurod Dekhkanovich Khusanov,
⁴Hamdam Tursunov**

*¹RhD researcher of Andizhan Machine Building Institute, Andizhan region, Republic of
Uzbekistan*

*²Professor of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Tashkent,
Republic of Uzbekistan*

*³Assistant of Andizhan Institute of Agriculture and Agrotechnology, Andizhan region, Republic
of Uzbekistan*

⁴Assistant of Andizhan Machine Building Institute, Andizhan region, Republic of Uzbekistan

Article DOI: <https://doi.org/10.36713/epra6785>
DOI No: 10.36713/epra6785

ABSTRACT

According to the results of the correlative modeling regression, there is a strong correlation link between the concentration of harmful substances in the atmosphere and the amount of tree accumulation in the leaves. Such bonding was most prominent at juniper trees. In particular, the density of binding between the two sulphate proteins and the accumulation of this substance in the leaf of selected trees was 0.88 in the juniper tree, 0.78 in the oak tree, 0.75 in the chestnut, and 0.93 in the pavlonion tree.

KEY WORDS: *Ecosystem, atmosphere, leaves, substances, trees, pests, urban, connection, linear connection, regression, correlation, chlorophyll.*

INTRODUCTION

Atmospheric pollutants affect living organisms in the form of biochemical agents, leading to disruptions in the ultramicroscopic structure of the cell. This leads to physiological processes and metabolism of plants and leads to a decrease in its productivity and growth rate, life expectancy. In ecosystems, depending on the genetic characteristics of trees, the effects of pollutants on them of different types and levels may be different. The level of stress on trees by atmospheric substances develops in two situations, such as the amount of time in limited time

intervals or the accumulation over a long period of time.

Due to the release of industrial or other types of anthropogenic substances into the atmosphere, their concentration changes and accumulation in soil and vegetation in certain areas is observed. Research in this area first time McLaughlin SB [1]. led in the 1980s. During this period, sulfur dioxide was the main air pollutant in Europe and America, as well as in the Soviet Union. The fact that the first joint scientific project of Soviet and American scientists in the 1980s also focused on the



impact of forest ecosystems and pollutants shows how problematic the effects of substances on trees were during this period [2]. To date, research in this area is extensive and specific to each region.

By the end of the last century, acid rain had emerged, which was one of the main threats to the tree ecosystem. Actually acid rain. Although the emergence of it was observed in the Middle Ages, the scale of today's anthropogenic changes, the concentration of industrial and domestic wastes in the atmosphere began to become dangerous, led to an increase in the intensity of acid rain [3].

Based on the results of research, with the increase of atmospheric pollutants, the tree ecosystem in the world's forest region has lost 45% of its viability [4]. Today, in the study of tree changes in the world, a method of diagnosis and classification based on changes in the morphology of the tree, consisting of 12 points, has been applied [5]. The purpose of this study is to study the relationship between the accumulation of pollutants in trees in the context of the concentration of pollutants in the atmosphere in the city of Andijan.

RESEARCH METHODOLOGY

The method of studying the accumulation of these substances in the leaves of different trees with atmospheric concentrations of pollutants in the study area is to analyze them by modeling simple statistical relationships. To do this, a correlation between the two variables under study was identified and their reliability was assessed.

The detected concentration of harmful substances in the atmosphere was determined using the analysis of samples taken from tree leaves at the same time. Under such conditions, it is not possible to determine the intensity of accumulation. The reason is harmful to the atmosphere. The accumulation of substances in a tree leaf takes place at certain intervals.

The analysis of the interdependencies is based on a linear regression equation:

$$y_x = a_0 + a_1 x$$

Here, the a_1 -parameter is called the regression rate, and it represents the factor character efficiency or, conversely, the rate of decrease, i.e., how much the resulting variable increases when the character value increases by one unit. Based on this straight-line equation, the correlation coefficient of the correlation density of changes in the amount of matter in tree leaves with increasing concentration of harmful substances in the atmosphere was determined:

$$r_{xy} = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sqrt{\sum(x - \bar{x})^2 \sum(y - \bar{y})^2}}$$

The bond is weak if the bond density lies in the range of $\pm 0.30.5$; The connection is average if it lies in the range of $\pm 0.50.8$; If it lies in the range of $\pm 0.81.0$, the bond is considered strong [6].

During the correlation analysis, a 95% confidence interval was selected to determine the reliability between the mean and the variance [7].

THE RESULTS OBTAINED AND THEIR DISCUSSION

The atmosphere is a practically unlimited air phase in which physical and chemical processes are essential for the survival of a living organism. The presence of anthropogenic pollutants in the air cavity and its concentration have a detrimental effect on the human body, primarily secondary [8]. This effect is manifested in latent, regular and irreversible forms in trees. The effect at low concentrations, in turn, does not cause rapid symptoms in plants, but disrupts physiological processes. While regular exposure adversely affects the chlorophyll process, irreversibly the concentration of substances in the atmosphere causes the tree to self-destruct due to the inability of the tree stem to absorb water by the mesophilization process or the unusual shedding process of the leaf.

Studies have shown that trees have a detrimental effect on tree ecosystems when their resistance to such substances does not exceed the level of their adaptive properties. a can not. Such a concentration limit was expressed in 1984 in the following figures: the maximum value of NO₂ in the atmosphere is a maximum of 0.04 mg per cubic meter of air, an average of 0.02 mg per day; maximum level for lead 0.01 mg, average daily 0.002 mg, maximum value for SO₂ 3.0 mg daily maximum 1.0 mg; for formaldehyde, the maximum was set at 0.02 mg, with an average of 0.003 mg daily (Table 1).

The results of regression correlative modeling revealed a strong correlation between the concentration of harmful substances in the atmosphere and the amount of accumulation in the leaves of trees. Such a connection was especially evident in the spruce tree.

In particular, the density of the bond between the two oxides of sulfate and the accumulation of this substance in the leaves of selected trees was 0.88 in spruce, 0.78 in oak, 0.75 in chestnut and 0.93 in pavlovia. (You can see the reliability of this correlation equation in Figure 1, point a).

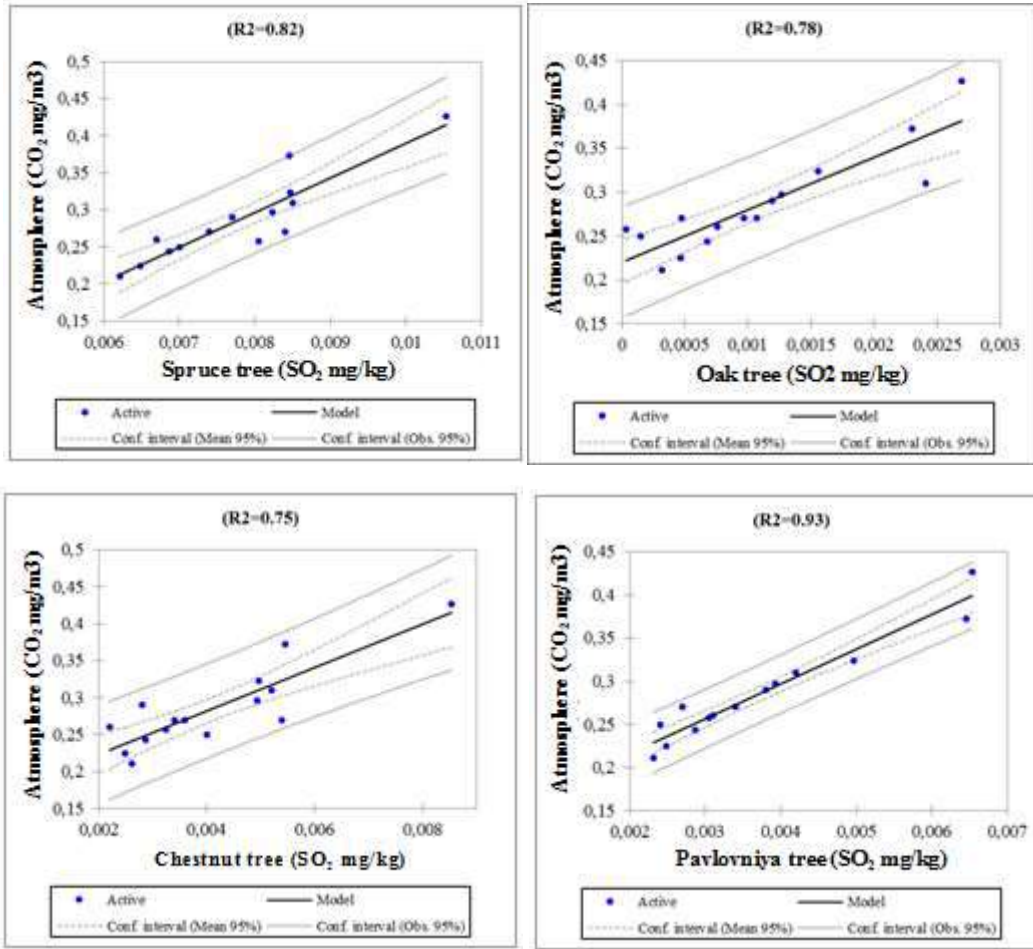


Table 1
Parameters of the regression model equation between harmful substances in the atmosphere and their amounts in tree leaves
(In modeling, the dependence of SO₂, Pb, NO₂, formaldehyde in the atmosphere on the leaves of four trees was studied)

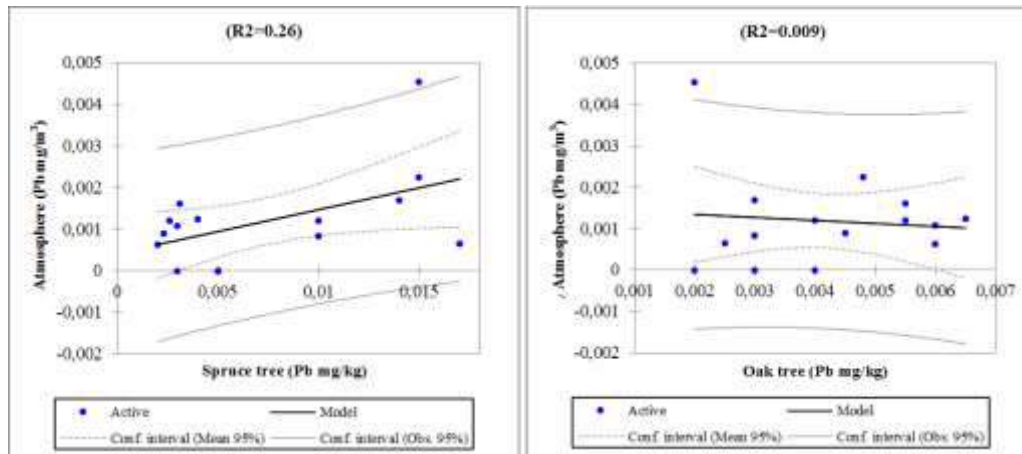
Indicators	Linear equation	Correlation coefficient
SO₂		
Spruce tree	SO ₂ = -0.07730 + 46.68814 * Spruce tree (mg / kg)	0.82
Oak tree	SO ₂ = 0.21984 + 59.87591 * Oak tree (mg / kg)	0.78
Chestnut tree	SO ₂ = 0.16420 + 29.36898 * Chestnut tree (mg / kg)	0.75
Pavlonia tree	SO ₂ = 0.13524 + 40.40275 * Pavlonia tree (mg / kg)	0.93
Pb		
Spruce tree	Pb = 0.00040 + 0.10578 * Spruce tree (mg / kg)	0.26
Oak tree	Pb = 0.00149-0.07229 * Oak tree (mg / kg)	0.009
Chestnut tree	Pb = 0.00254-0.64074 * Chestnut tree (mg / kg)	-0.38
Pavlonia tree	Pb = 0.00047 + 0.35000 * Pavlonia tree (mg / kg)	0.02
NO₂		
Spruce tree	NO ₂ = 0.01750 + 2.33779 * Spruce tree (mg / kg)	0.95
Oak tree	NO ₂ = 0.02509 + 2.35516 * Oak tree (mg / kg)	0.94
Chestnut tree	NO ₂ = 0.33119-2.25072 * Chestnut tree (mg / kg)	-0.08
Pavlonia tree	NO ₂ = 0.05545 + 4.00437 * Pavlonia tree (mg / kg)	0.80
Formaldehyde		
Spruce tree	Formaldehyde = 0.00631 + 42.25027 * Spruce tree (mg / kg)	0.78
Oak tree	Formaldehyde = 0.00948 + 32.48659 * Oak tree (mg / kg)	0.53
Chestnut tree	Formaldehyde = 0.00904 + 14.17263 * Chestnut tree (mg / kg)	0.71
Pavlonia tree	Formaldehyde = 0.01177 + 15.13008 * Pavlonia tree (mg / kg)	0.62

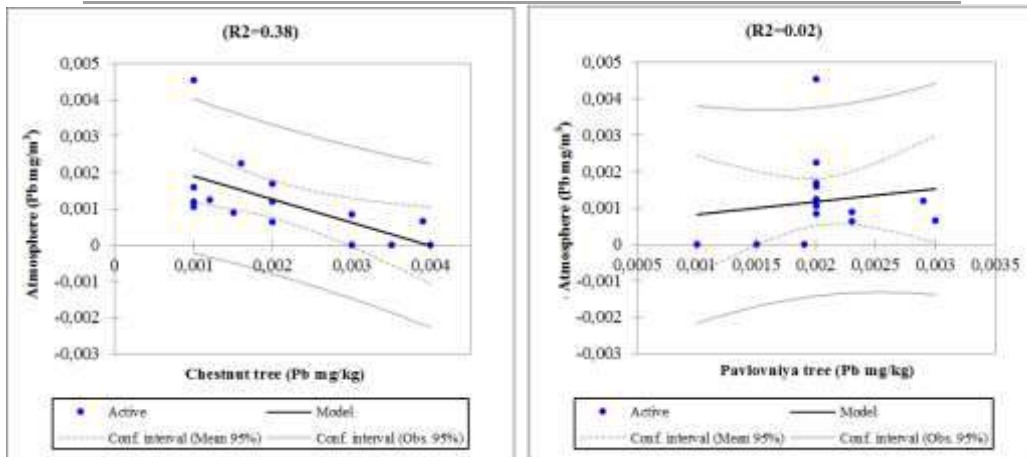
The characteristic feature of the transformation of sulfur dioxide is its oxidation in the atmosphere and its strong accumulation in trees ranging from sulfate to its other compounds. Its oxidation takes place in two practical ways: first, it encounters a strong oxidant in a gaseous phase by

photochemical homogeneous reaction (hydroxyl process); secondly heterogeneous i.e. cloud, fog absorption of water vapor in other types of precipitation. In both cases, its exceeding the permissible norm leads to the development of irreversible negative processes for the trees. In addition, sulfur dioxide is a toxic substance with strong assimilation properties.

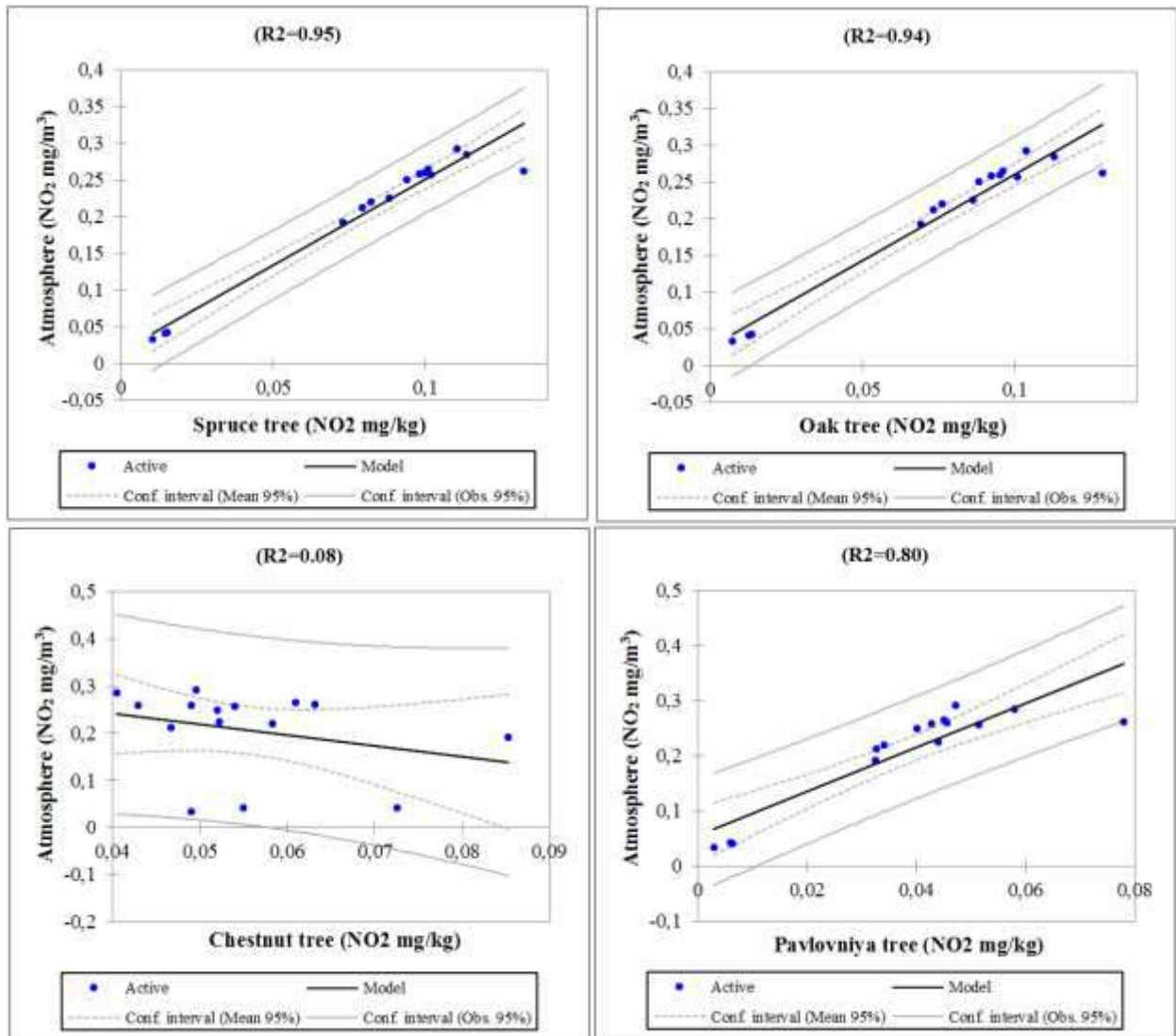


A) Sulfate is two oxides

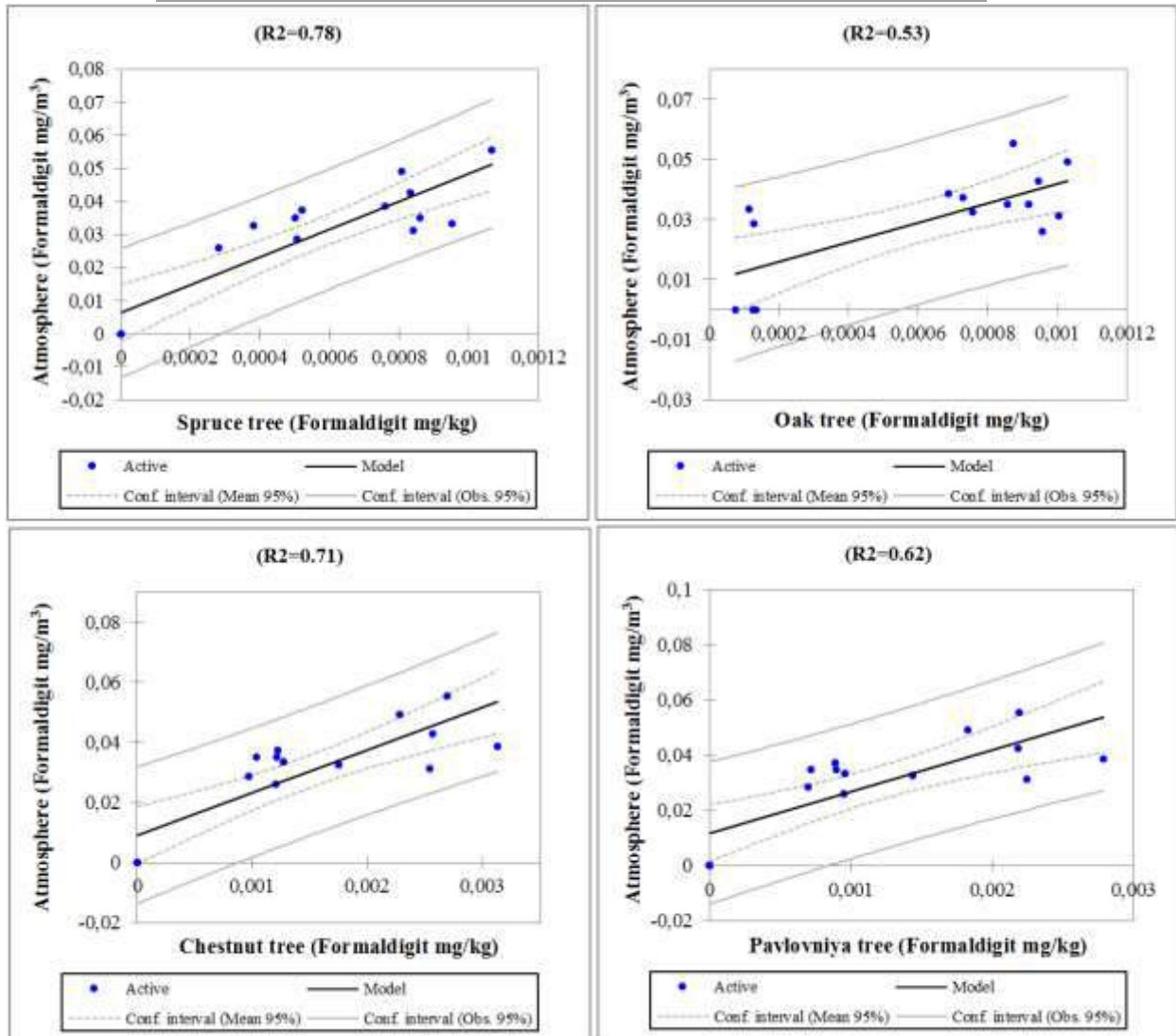




B) Lead substance



S) Nitric oxide



D) formaldehyde material

Figure 1. Results of a regression correlation model between atmospheric pollutants and their content in tree leaves (data formed as a result of three years of parallel field research)

The accumulation of lead material from heavy metals in a tree leaf leads to the development of two types of harmful processes. First, it has a harmful chemical effect, disrupts the chlorophyll process, and secondly, accumulates in the leaves and participates in the process of thermal burning. According to the modeling results, the bond strength between the concentration in the atmosphere and the cumulation in the tree leaf is weak. Even the accumulation in the leaves of the chestnut tree showed an inverse relationship (Table 2, Fig. 1, b-band).

The link between atmospheric nitrogen oxides and cumulation in tree leaves is spruce, oak, and pavlo. showed that the vniya trees had a straight and strong connection, a weak connection with the

chestnut tree. Maximum concentrations of nitrogen dioxide in the atmosphere of up to 0.04 mg / m³ are important for nitrogen saturation of trees.

Formaldegid is one of the most harmful chemicals, its concentration above 0.02 mg / m³ causes cell death in tree leaves and spread of necrotic process. Concentrations in excess of this limit have been observed to develop even when the duration of exposure is 10 minutes [10]. It was found that there was a moderate correlation between the concentration of formaldehyde in the atmosphere and its amount in the leaves of the tree (Fig. 1, d-band).

CONCLUSION

In Andijan, it was found that there is a linear relationship between the accumulation of harmful substances in the atmosphere in the leaves of existing tree species isolated for research. The highest accumulation of harmful substances was observed in the leaves of the spruce tree, while the lowest rate was observed in the chestnut tree. Depending on the



results of the analysis, the chestnut tree can be called the cleanest ecological tree.

The highest bond between the harmful substances was the nitrogen oxide contribution, while the lowest bond was the lead substance. The concentration of lead in the leaves of the chestnut tree is the concentration of this substance in the atmosphere found to be inversely related to age.

The study aimed to determine a linear relationship between the accumulation of harmful substances detected in the atmosphere in tree leaves, and this connection was proved.

REFERENCES

1. McLaughlin SB *Effects of air pollution on forests* // J. APCA (Air Pollution Cont Association). 1985. Vol. 35. P. 512-534.
2. Alekseev V. A., Dochinjer L. S. *Forest ecosystems and atmospheric pollution* // Forestry. 1981. № 5. S. 64-71.
3. *Vremennye normativy predelno dopustimyx kontsentratsiy zagryaznyayushchix veshchestv v atmosfernom vozduxe, okazывayushchix vrednoe vozdeystvie na lesnye nasajdeniya v rayone muzea-usadby „Yasnaya Polyana”*. M., 1984. 12 p.
4. Alekseev V. A. *Diagnostics of life condition of trees and woods* // Forestry. 1989. № 4. S. 51-57.
5. Eliseeva II, Yuzbashev MM. *General theory of statistics*. 5th ed. M.: Finance and Statistics, 2005.
6. Zaks L. *Statisticheskoe otsenivanie M.*: Statistika, 1976. - 598 p.
7. Zeldin M.A., Barinov N.P., Abbasov M.E. *Doveritelnyy interval for srednego po vyborke iz konechnoy generalnoy sovokupnosti*. PSMI Register otsenshchikov, №11, 2012, p.70-75
8. Mudd J. V. *Biochemical effects of some air pollutants on plants* // Air pollution damage to vegetation: Adv. Chem. 1973. Ser. 122. P. 31—47.
9. *Forest ecosystems and atmospheric pollution*. Under the editorship of V. A. Alekseeva - JL: Nauka, 1990. - 200 p.
10. *Sovmestnyy promejutochnyy doklad o politicheski znachimyx nauchnyx vyvodax 2019 goda*. Pyataya sovmestnaya session Geneva, 9–13 September 2019. ECE / EB.AIR / GE.1 / 2019/3
11. Pavlov I.N. *Drevesnye rasteniya v usloviyax tehnogennogo zagryazneniya* - Ulan-Ude: BNTs SO RAN, 2005. - 370 p.
12. Grjibovskiy A.M., Unguryanu T.N. *Analysis of biomedical data with the use of a package of statistical programs SPSS: uchebnoe posobie* / A.M. Grjibovskiy, T.N. Unguryanu. - Arkhangelsk: Izd-vo Severnogo gosudarstvennogo meditsinskogo universiteta, 2017. - 293 p. ISBN 978-5-91702-255-0



AUTHENTICATION BY ENCRYPTED NEGATIVE PASSWORD

Haseeb Ur Rahman¹, Mohd Asghar², Mohd Abdul Salman³,

^{*1*2*3}*Affiliated to Osmania University, Information Technology, ISL engineering college, Hyderabad, Telangana, India.*

(Sheena Mohammed, Department of Information Technology, ISL engineering college, Hyderabad, Telangana, India.)

ABSTRACT

Secure password storage is a vital aspect in systems based on password authentication, which is most widely used authentication technique, despite some security flaws. In this paper, we propose a password authentication framework that is designed for secure password storage and could be easily integrated into existing authentication systems. In our framework, first, the received plain password from a client is hashed through a cryptographic hash function (e.g., SHA-256). The hashed password is converted into a negative password. Finally, the negative password is encrypted into an encrypted negative password (ENP) using a symmetric-key algorithm (e.g., AES), and multi-iteration encryption could be employed to further improve security. The cryptographic hash function and symmetric encryption make it difficult to crack passwords from ENPs. Moreover, there are lots of corresponding ENPs for a given plain password, which makes precomputation attacks (e.g., lookup table attack) infeasible. The algorithm complexity analyses and shows that the ENP could resist lookup table attack and provide stronger password protection under dictionary attack. It is worth mentioning that the ENP does not introduce extra elements; besides, the ENP could still resist precomputation attacks. Most importantly, the ENP is the first password protection scheme that combines the cryptographic hash function, the negative password, and the symmetric-key algorithm, without the need for additional information except the plain password.

KEYWORDS: Plain parole, Cryptographic hash function, Encrypted negative parole, symmetric-key algorithm.

I. INTRODUCTION

Owing to the development of the Internet, a vast number of online services have emerged, in which password authentication is the most widely used authentication technique, for it is available at a low cost and easy to deploy [1], [2]. Hence, password security always attracts great interest from academia and industry [3]. Despite great research achievements on password security, passwords are still cracked since users' careless behaviors [4]. For instance, many users often select weak passwords [5], [6]; they tend to reuse same passwords in different systems [7]-[10]; they usually set their passwords using familiar vocabulary for its convenience to remember [11], [12]. In addition, system problems may cause password compromises. It is very difficult to obtain passwords from high security systems. On the one hand, stealing authentication data tables (containing usernames and passwords) in high

security systems is difficult. On the other hand, when carrying out an online guessing attack, there is usually a limit to the number of login attempts [13]. However, passwords may be leaked from weak systems [14]. Vulnerabilities are constantly being discovered, and not all systems could be timely patched to resist attacks, which gives adversaries an opportunity to illegally access weak systems [15]. In fact, some old systems are more vulnerable due to their lack of maintenance. Finally, since passwords are often reused, adversaries may log into high security systems through cracked passwords from systems of low security.

II. PROPOSED METHODOLOGY

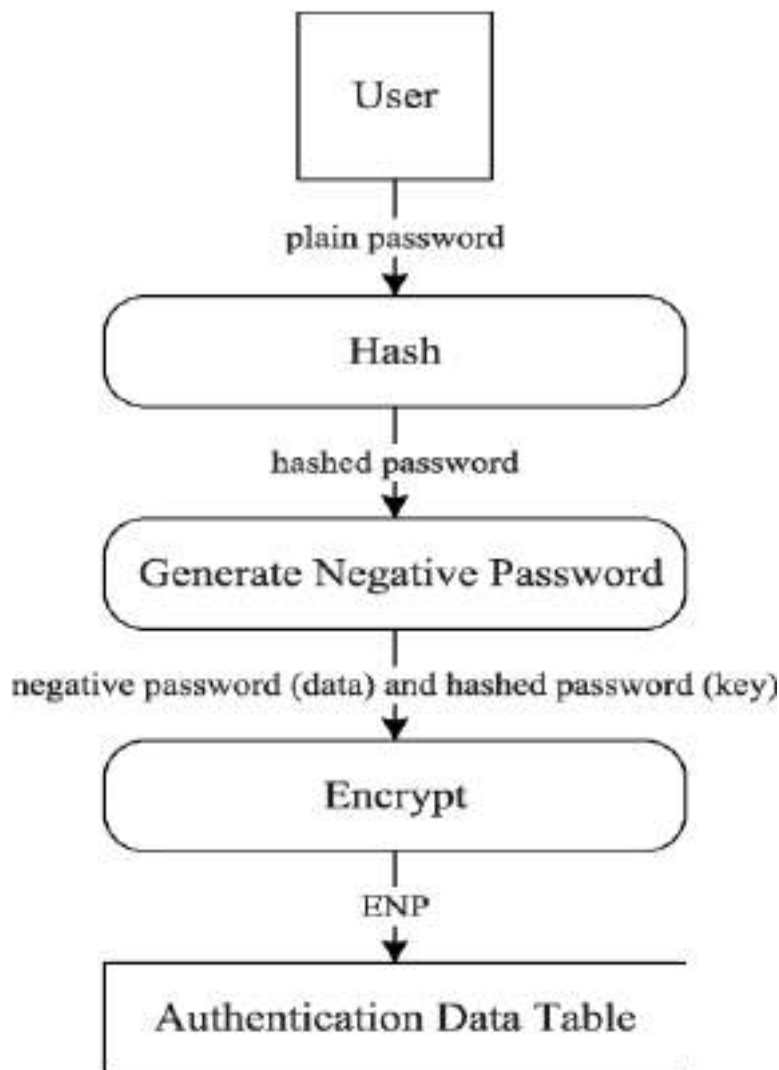
To protect passwords in associate degree authentication knowledge table, the system designer should 1st choose a cryptological hash



perform and a symmetric-key formula, wherever the condition that has to be glad is that the dimensions of the hash price of the chosen cryptological hash perform is adequate to the key size of the chosen symmetric-key formula. For convenience, some matches of cryptological hash functions and symmetric-key algorithms. additionally, cryptological hash functions and

symmetric-key algorithms that don't seem to be listed here might even be utilized in the ENP, that adequately indicates the pliability of our framework. The planned framework relies on the ENP; therefore, for higher understanding, the information flow sheet of the generation procedure of the ENP.

III. MODELING AND ANALYSIS



IV. RESULTS AND DISCUSSION

Data Owner during this module, {the knowledge|the info|the information} owner uploads their data within the net server. For the protection purpose the information owner encrypts the information file then store within the net. The information owner will have capable of manipulating the encrypted record. {the knowledge the info the information} owner can send Meta data to Audit net. In audit net raw or information data is offered for auditing and knowledge integrity

checking purpose. Knowledge owner can produce associate degree user additionally the} knowledge owner will set the access permission.

Data Auditing and Verification the information owner can even audit the information integrity within the corresponding net for validatory whether or not the information is safe or not mistreatment digital sign and net uniform resource locator. If the information isn't safe then he can delete the information and re transfer the information to the corresponding net server.

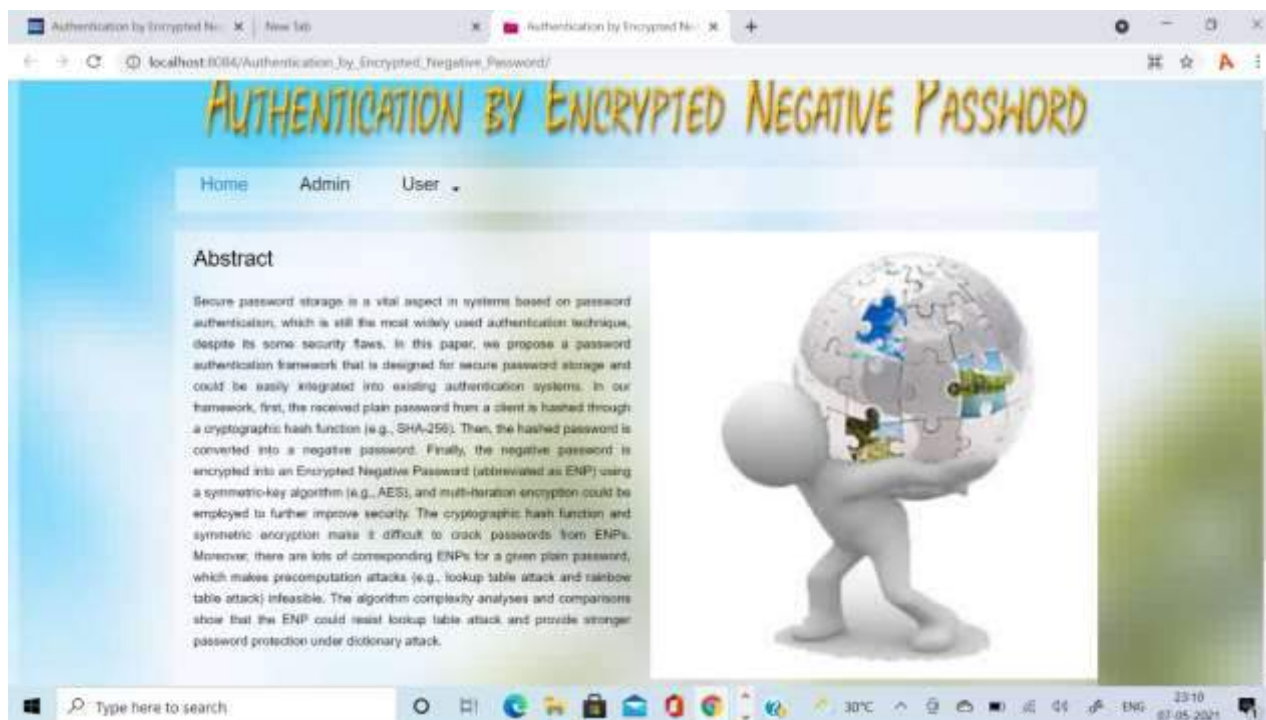


Fig 1.0: Home page.

Web Server the online server is accountable for knowledge storage associate degreeed file authorization for an user. The information file are hold on with their tags like file name, secret key, digital sign, and owner name. the information file are causing supported the privileges. If the privilege is correct then the information are sent to the corresponding user and conjointly can check the file name, user name and secret key. If all area unit true then it'll send to the corresponding user or he are captured as aggressor. the online server {can conjointly|also can|can even|may also|may} act as aggressor to switch the information which is able to be auditing by the audit net and also read All Encrypted Negative parole, read All aggressor, read All parole Attackers.

Data Consumer (End User) the information shopper is nothing however the top user WHO can request and gets file contents response from the corresponding net servers. If the file name and secret key, access permission is correct then the top is obtaining the file response from the online {or else|alternatively| as

associate degree alternative |instead} he are thought of as an aggressor and conjointly he are blocked in corresponding net. If he desires to access the file once block he desires to United Nations block from the online and conjointly verifies parole. aggressor is one WHO is group action the online file by adding malicious knowledge to the corresponding net. they will be at intervals an online or from outside the online. If aggressor is from within the online then those attackers area unit referred to as internal attackers. If the aggressor is from outside the online then those attackers area unit referred to as external attackers.

Aggressor aggressor is one WHO is group action the online file by adding malicious knowledge to the corresponding net. They will be at intervals an online or from outside the online. If aggressor is from within the online then those attackers area unit referred to as as internal attackers. If the aggressor is from outside the online then those attackers area unit referred to as external attackers.



Fig 2.0: Admin login page.



Fig 3.0: User registration page.

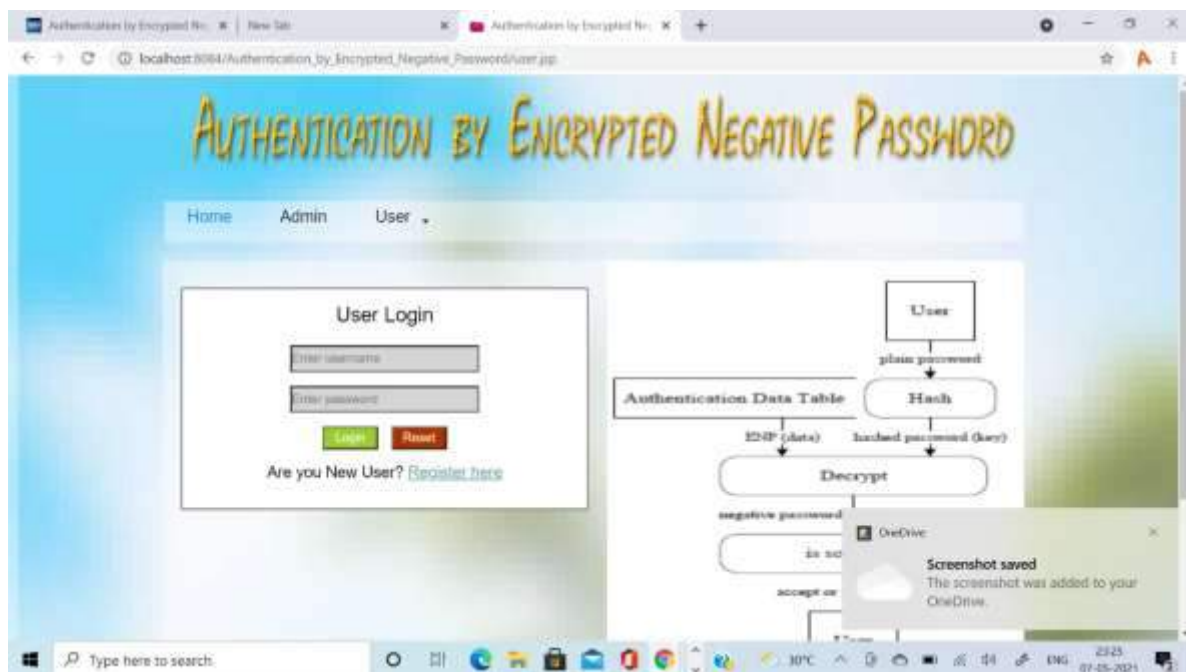


Fig 4.0: User login page

V. CONCLUSION

In this paper, we tend to planned a parole protection theme referred to as ENP, and conferred a parole authentication framework supported the ENP. In our USER Plain parole Hash Hashed parole Generate negative parole write Authentication knowledge table International Journal of Engineering analysis & Technology (IJERT) ISSN: 2278-0181 printed by, www.ijert.org RTICCT - 2020 Conference Proceedings Volume eight, Issue twelve Special Issue - 2020 nineteen framework, the entries within the authentication knowledge table area unit ENPs. In the end, we tend to analyzed and compared the attack complexness of hashed parole, salt-cured parole, key stretching and also the ENP. The results show that the ENP might resist operation table attack and supply stronger parole protection underneath lexicon attack. It's price mentioning that the ENP doesn't want further components (e.g., salt) whereas resisting operation table attack.

VI. REFERENCES

1. J. Bonneau, C. Herley, P. C. van Oorschot, and F. Stajano, "Passwords and the evolution of imperfect authentication," *Communications of the ACM*, vol. 58, no. 7, pp. 78–87, Jun. 2015.
2. M. A. S. Gokhale and V. S. Waghmare, "The shoulder surfing resistant graphical password authentication technique," *Procedia Computer Science*, vol. 79, pp. 490–498, 2016.
3. J. Ma, W. Yang, M. Luo, and N. Li, "A study of probabilistic password models," in *Proceedings of 2014 IEEE Symposium on Security and Privacy*, May 2014, pp. 689–704.
4. A. Adams and M. A. Sasse, "Users are not the enemy," *Communications of the ACM*, vol. 42, no. 12, pp. 40–46, Dec. 1999.
5. E. H. Spafford, "Opus: Preventing weak password choices," *Computers & Security*, vol. 11, no. 3, pp. 273–278, 1992.
6. Y. Li, H. Wang, and K. Sun, "Personal information in passwords and its security implications," *IEEE Transactions on Information Forensics and Security*, vol. 12, no. 10, pp. 2320–2333, Oct. 2017.
7. D. Florencio and C. Herley, "A large-scale study of web password habits," in *Proceedings of the 16th International Conference on World Wide Web*. ACM, 2007, pp. 657–666.
8. R. Shay, S. Komanduri, A. L. Durity, P. S. Huh, M. L. Mazurek, S. M. Segreti, B. Ur, L. Bauer, N. Christin, and L. F. Cranor, "Designing password policies for strength and usability," *ACM Transactions on Information and System Security*, vol. 18, no. 4, pp. 13:1–13:34, May 2016.
9. D. Wang, D. He, H. Cheng, and P. Wang, "fuzzyPSM: A new password strength meter using fuzzy probabilistic context-free grammars," in *Proceedings of 2016 46th Annual IEEE/IFIP International Conference on Dependable Systems and Networks*, Jun. 2016, pp. 595–606.
10. H. M. Sun, Y. H. Chen, and Y. H. Lin, "oPass: A user authentication protocol resistant to password stealing and password reuse attacks," *IEEE Transactions on Information Forensics and Security*, vol. 7, no. 2, pp. 651–663, Apr. 2012.
11. M. Zviran and W. J. Haga, "Password security: An empirical study," *Journal of Management Information Systems*, vol. 15, no. 4, pp. 161–185, 1999.
12. P. Andriotis, T. Tryfonas, and G. Oikonomou, "Complexity metrics and user strength perceptions of the pattern-lock graphical authentication method," in *Proceedings of Human Aspects of Information Security, Privacy, and Trust*. Springer International Publishing, 2014, pp. 115–126. International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 Published by, www.ijert.org RTICCT - 2020 Conference Proceedings Volume 8, Issue 12 Special Issue - 2020 20.



AGE-RELATED FEATURES OF THE STRUCTURE OF DISEASES OF THE ORAL MUCOSA IN CHILDREN

Ismailov Ilxomjon Xurbaevich

*Assistant of the Department of Therapeutic, Orthopedic and Pediatric Dentistry,
Andijan State Medical Institute, Andijan city*

RESUME

A retrospective study of 73 medical records of children aged 1 month to 12 years was conducted, aimed at consultation to the dentist at the base of the Department of Pediatric Dentistry of the Andijan State Medical Institute. The average age was 7.8 ± 3.7 years. All patients were divided into groups depending on their age: Group I-1-11 months, group II-1-3 years, Group III – 4-7 years, group IV-8-12 years. Diagnoses were analyzed, as well as the results of bacteriological and virological studies. Destablished, which is the least children under the age of one year (11 children, or 15.1% of cases) were treated with diseases of the oral mucosa.

The most common diseases of the oral mucosa were observed in children aged 1 to 3 years (32 children, or 43.8% of cases). The analysis of the structure of diseases of the SOPR revealed the predominance of herpetic stomatitis in all age periods (with the exception of children under 1 year, in whom the stomatitis of candida etiology prevailed) (in group II – $62.5 \pm 8.6\%$; in group III- $35.3 \pm 11.6\%$, in group IV- $46.2 \pm 13.8\%$). Traumatic lesions of the oral mucosa were least frequently observed at the age of 8-12 years ($7.7 \pm 7.4\%$). In different age periods, the structure diseases of the SOPR have their own characteristics, and therefore preventive measures to prevent these diseases in children should be aimed at the most characteristic pathology for the corresponding contingent.

KEY WORDS: *diseases of the oral mucosa, stomatitis, gingivitis, children.*

INTRODUCTION

Diseases of the oral mucosa (OOP) remain one of the most pressing problems of therapeutic dentistry both among adult patients and in children, which is primarily due to the high prevalence of this pathology [1–3].

List of diseases that manifest themselves on the SOPR, it is quite diverse. This includes injuries of traumatic origin, infectious diseases, allergic and drug injuries, etc. However, in children, SOPR diseases have specific features. So, typical for children under 2 years of age are decubital afta due to damage to the pacifier, weakened children may have Bernard afta along the line of connection of the soft and hard palate, with a constant cough, the child often has proliferative changes in the language, etc. [4-6].

In addition, most specialists are unanimous in the opinion that to understand the pathological processes in the oral cavity in children, it is important to know the topographical, morphological, histological and histochemical processes that change

dramatically depending on the age [3, 7].

There are three age periods that have significant differences in structure and characterize the dynamics of the development of the main structures of the mucous membrane. Breast period-from the 10th day up to 1 year, early childhood-1-3 years, children's periods: primary-4-7 years, secondary-8-12 years. With the change of periods, the factors of local protection of the mucous membrane are improved [8, 9].

In this regard, for a more targeted diagnostic search and, accordingly, to improve the predicted results of therapy in this pathology, it is important to have a correct idea of how to, which of the diseases of the oral mucosa predominate in different age periods.

The aim of the study was to study the age-related features of the structure of oral mucosa diseases in children.

MATERIALS AND METHODS

A retrospective study of 73 medical records of



children aged from 1 month to 12 years was conducted, aimed at consulting a stomatologist at the Department of Pediatric Dentistry of the ASMI. The average age was 7.8 ± 3.7 years. All patients were divided into groups depending on their age: Group I – 1-11 months, Group II-1-3 years, group III-4-7 years, Group IV – 8-12 years. Diagnoses were analyzed, as well as the results of bacteriological and virological studies.

RESEARCH RESULTS AND DISCUSSION

When analyzing appeals in different age periods, it was found that the least with diseases of the oral mucosa children under the age of one year were treated (11 children, or 15.1% of the cases).

The most common diseases of the oral mucosa were observed in children aged 1 to 3 years (32 children, or 43.8% of cases).

At the age of 4-7 years, 17 children (23.3% of cases) turned to a stomatologist, and at the age of 8-12 years – 13 children (17.8% of cases).

In the structure of diseases of the SOPR among children of group I, acute candidiasis stomatitis is most often noted (7 children, $63.6 \pm 14.5\%$), much less, mainly in children in the second half of life, traumatic injuries of the SOPR were noted (3 patients, $27.3 \pm 13.4\%$), which, in all probability, is associated with an increase in motor activity and a tendency to learn the world.

Stomatitis of other etiology in children up to 1 years were found only in $9.1 \pm 8.7\%$ of cases.

A sufficiently high resistance of the child's body to the occurrence of viral and bacterial stomatitis in the first year of life and the predominant development of fungal diseases oral mucosa, probably, they can be caused by the placental transmission of maternal antibodies. This is also facilitated by a neutral or slightly acidic reaction saliva [2].

In the age group from 1 to 3 years, acute herpetic stomatitis was most often noted (20 children; $62.5 \pm 8.6\%$; $p < 0.001$). Acute candida stomatitis was registered in 7 patients ($21.9 \pm 7.3\%$; $p < 0.001$). Injuries were less common severe damage to the SOPR occurred in 7 children ($21.9 \pm 7.3\%$). Among the traumatic injuries, decubital afta was registered in 2 ($6.3 \pm 4.3\%$) children.

In 2 ($6.3 \pm 4.3\%$) patients, there was a combined lesion of the SOPR – acute stomatitis after traumatic damage to the oral mucosa.

In general, pediatricians and dentists see the reason for the prevalence of acute herpetic stomatitis in this age group as the high contagiousness of herpetic infection among children with reduced immunity. According to the World Health

Organization, about

90% of the world's inhabitants are infected herpes simplex virus, but only 25-30% of them have clinical manifestations of the disease, which are recognized untimely. This, in turn, contributes to the rapid spread of infection among the most vulnerable group – young children with primary or secondary immune deficits [5].

For children of group III (4-7 years old) the characteristic pathology of the SOPR was acute aphthous stomatitis. As for the applicants, in 6 ($35.3 \pm 11.6\%$) cases it was a herpetic infection, in 4 ($23.5 \pm 10.3\%$) – a candida infection, and in 4 ($23.5 \pm 10.3\%$) children were identified stomatitis of bacterial etiology.

Traumatic injuries were registered in 3 ($17.6 \pm 9.2\%$) cases.

In the group of schoolchildren aged 8-12 years (group IV), recurrent herpetic stomatitis ($46.2 \pm 13.8\%$), allergic aphthous stomatitis ($15.4 \pm 10.0\%$), and multiform exudative erythema ($7.7 \pm 7.4\%$) were detected. An increased tendency to allergic manifestations on the part of the oral mucosa is most likely associated with an increase in sensitization to this age period [10]. Traumatic injuries were less common than in other groups ($7.7 \pm 7.4\%$).

An interesting fact is that older school children (11-12 years old) had mild leukoplakia ($7.7 \pm 7.4\%$) and juvenile gingivitis ($15.4 \pm 10.0\%$), which can be explained by age-related histological and histochemical differences caused by hormonal changes beginning by 12-13 years [11, 12].

Conclusion. Thus, the study of SOPR diseases in children showed that the most frequent referrals were in the age category from 1 to 3 years (32 children; 43.8%). The analysis of the structure of the diseases of the oral mucosa revealed the prevalence of herpetic stomatitis in all age periods (with the exception of children under 1 year, in whom the stomatitis of candida etiology prevailed). (in group II- $62.5 \pm 8.6\%$; in group III- $35.3 \pm 11.6\%$, in group IV- $46.2 \pm 13.8\%$).

Traumatic lesions of the SOPR were less often observed at the age of 8-12 years ($7.7 \pm 7.4\%$). The results obtained allow us to come to the conclusion that in different age periods, the structure of diseases of the SOPR has its own characteristics, and therefore preventive measures to prevent diseases of the oral mucosa in children should be aimed at the most characteristic pathology for the corresponding contingent.

LITERATURE

1. Lutsкая I. K. *Diseases of the oral mucosa.* - M., 2014. - 224 p.
2. Molofeeva V. A., Lunitsyna Yu. V. // *Problems of dentistry.* - 2011. - No. 3. - p. 47-49.



3. *Mikhailchenko A.V., Medvedeva E. A., Mikhailchenko D. V. // Volgograd Scientific and Medical University journal. - 2016. - No. 1. - p. 3-7.*
4. *Iskakova M. K., Zarkumova A. E., Nurmukhametova G. K. // Vestnik KazNMU. - 2018. - No. 1. -p. 188-192.*
5. *Zarkumova A. E. // Vestnik KazNMU. - 2017. - No. 3. - pp. 168-175.*
6. *Zakirov T. V., Pyriev A. A. // Problems of Stomatology. - 2015. - No. 11. - p. 32-36. - Doi. -p. 10.18481/2077-7566-2015-11-32-36.*
7. *Lutskaya I. K. // Modern dentistry. - 2016. - No. 4. - p. 27-30.*
8. *Eshiev A.M., Azimbaev N. M. // Young scientist. - 2015. - No. 4. - P.92-95.*
9. *Kiselnikova L. P. Children's therapeutic dentistry: A textbook. - M., 2010 – 208 p.*
10. *Modina T. N., Deloveridi V. A., Dyatlova Yu. Yu., Bolbat M. V. // Clinical dentistry. – 2014. – No. 3.–p. 14-17.*
11. *Orekhova L. Yu., Kudryavtseva T. V., Cheminaeva N. R. et al. // Periodontology. – 2014. – №2 (71). –P. 3-5.*
12. *Admakin O. I. // Stomatology. – 2007. – №86 (2). – Pp. 80-85*



PRAGMATIC NORMS INTO LANGUAGE

¹Shokhruz Askarjon ugli Bozorov, ²Yusuf Sobir ugli Khayrullaev

¹Lecturer, Samarkand State Medical Institute, Samarkand, Uzbekistan

²Lecturer, Samarkand State Medical Institute, Samarkand, Uzbekistan

ABSTRACT

This article is illustrated pragmatic norms rooted in different kinds of styles and norms. In addition, activities are given for clear understanding.

Today's world where we live in, we bump into new comers everywhere and everytime, for this reason pragmatic should be used in every culture. Moreover, activities rooted in students' language level, materials are used with the help of friends.

KEY WORDS: *pragmatic norms, limited grammatical ability, socio-pragmatic, instructional materials.*

INTRODUCTION

When people run into communication with foreigners, they come across a variety of confusions that make them unexpectedly generate diverse language norms although they think they have adequately learned the target language. In such certain occasions, they stay baffled what to say or how to react to the preconceived context that might result from five known causes of learners' divergence from pragmatic norms (Ishihara and Cohen, 2010). Consequently, they in most cases have to rely on their own speculation about what the speakers of the target language would usually say which is sometimes appropriate or inappropriate in the particular setting. According to Ishihara and Cohen (2010), the five causes are negative transfer of pragmatic norms, limited grammatical ability in the L2, overgeneralization of L2 pragmatic norms, effect of instruction or instructional materials and resistance to using L2 pragmatic norms, the last of which is considered due to learner choice. These problems of pragmatic divergence can be up to an extent tackled with classroom instructions including awareness raising tasks directed to both linguistic focus and socio-pragmatic focus (Cutting, J, 2015).

THE MAIN RESULTS AND FINDINGS

Considering the topic, the two categories, negative transfer of pragmatic norms and limited grammatical ability in the target language may influence learners most. As far as negative transfer of

pragmatic norms is considered, it occurs in situations where the linguistic and cultural norms of the L2 are partly or completely different from those of the L1. Consequently, L1 speakers have to rely on the transfer of behavior same as L1 norms, which causes a misinterpretation and confusion between communicators (Ishihara and Cohen, 2010). This, as mentioned above, can result from unawareness of L2 norms and its culture. For example, imagine an Uzbek learner of Russian is visiting his friend in Moscow. He needs a help from someone to find the address. So, he faces a middle-aged woman and asks "Excuse me aunt, can you tell me ...?" which is the usual equivalent of asking from a middle aged-woman in his first language. However, asking in this way causes awkwardness or rejection in Russian and result with the failure of the conversation. As for limited grammatical ability in the L2, "Learners' grammatical control and pragmatic ability are not necessarily on a par with each other. Learners who can understand and produce highly accurate language forms from a grammatical point of view are not necessarily able to use language in a pragmatically appropriate manner. Even if they have flawless control of grammar, they may fail to understand the listener's intended meaning. Conversely, learners who demonstrate very little grammatical accuracy may still be able to interpret messages as intended and produce pragmatically appropriate utterances" (Ishihara & Cohen, 2010, p.80). However, according



to Ishihara and Cohen (2010), knowing more linguistic forms helps learners understand better and decipher the intended meaning of pragmatics by using grammatical forms. If one's grammar ability is limited up to an extent lower than advanced, they may partly or hardly make out the intended meanings of advanced structures. For instance, the simple sentence of this request "Could you help me, please" may not be a problem for lower level learners, but this one "I was wondering if you could help me, (please)" may probably. So, if they are unaware of these main challenges of both linguistic and pragmatic norms, they still I think find themselves confused not knowing what the intended meaning of the conveyed message is. These two learners' divergences being exceptionally potential reasons for misconceptions of requesting, learners should experience the versatile variations like real-world situations with the classroom exercises which reflect both language and culture simultaneously.

So as to address the two divergences of pragmatic norms, the tasks given below are designed according to the linguistic and socio-pragmatic norms.

Activities: The tasks help learners differentiate the norms of the L1 and L2 cultures in order to decrease the risk of inadvertent transferring from one culture into the other and get to more acquainted with the target linguistic forms.

Target learners: the students of the language center at "Study Bridge"

Level: Intermediate, upper-intermediate

Type of the instruction: Semi-deductive or semi-inductive – teacher starts the lesson with an enquiry statement about requests, then after a little discussion in L2, he starts with explicit information about pragmatics, then discussion of language and culture. Next, students practice with the activities and produce role-plays.

Outlines for activities

Activity 1: "Review time"

Time: 30 minutes

Aim: to check the students' knowledge about linguistic structures used for requesting and knowledge of pragmatics; to learn new words and phrases used for direct or indirect requests; to perfect their oral performances about requesting

"Can I take your pen for a moment?"

"Could I take your pen for a moment?"

"Would you mind taking your pen for a moment?"

Teacher Directions:

- Start the lesson with these questions referring to the students' belongings.
- Encourage students with your gestures and elicit to answer

- Ask students what type of speech act it is
- Ask students to work in pair and do as you did
- Ask students about types of requests in terms of politeness, directness and formality
- Explain the types in terms of politeness, directness and formality
- Write pre and post phases and words on the board and explain

Student directions:

- Answer the questions of the teacher
- Refer back to the previous lesson about requests
- Tell some variations from your culture
- Work in pairs and practice requesting with your partner
- Write down important phrases and words from the board

Activity 2: Listening to requests from different culture

Time: 20 minutes

Aim: to enhance and strengthen pragmatic awareness and grammar competence as well as listening skill

Student directions:

- Tell the students they are going to listen three short dialogues in different situations
- Link to the site https://m.youtube.com/watch?v=77184l_zQ9U and play the recording
- Facilitate and encourage them to watch and listen attentively
- Play again the dialogue for discussion

Student Directions:

- Watch and listen carefully.
- Make some notes about requests and responses from the video.
- Ask the students what they have just watched and elicit key points.
- Ask them what they wrote down and why they did so.
- Discuss those target forms with the students and pragmatic meanings

Activity 3: Read and analyze

Time: 20 minutes

Aim: to differentiate the pragmatic meaning and grammar forms and get to know pre and post phrases

Teacher directions:

- Divide the students into four groups
- Distribute the handouts and ask the students to compare two dialogues in the handout
- Explain what to do and give clear directions



- Monitor the groups and facilitate them if needed

Student directions:

- Read and analyze these short parts from dialogues in terms of social status, distance and intensity

- Find out whether the requests are direct, polite, formal or not

- Underline the target linguistic forms and pre and post phrases

Handouts

Dialogue 1

Nilufar and Nasiba are Webster University undergraduates and they get on well with each other. Nilufar missed one class last week because she had her own wedding party. Every class of the University is of great importance to all and Nilufar feels sorry for it and asks the class notes of Nasiba. Besides, she also wants Nasiba to give her a brief overview of the missed class.

Nasiba: Hoy, What is up?

Nilufar: Nothing, well. You know I missed one class because of my wedding. Umm, so I want to take your notes of the last lesson. Can I ... ohh no can you give it to me, please?

Nasiba: Mmm, Ok, no problem, would you mind giving it later because I haven't got it with me.

Nilufar: Ok, when you have it, then I can take. Thank you very much, anyway.

Nasiba: Okay. Let's meet later, then.

Nilufar: Nasiba opa! You know because of being absent in class, I don't know umm, how to do the tasks and ...

Nasiba: I see what you mean. You were wondering if I could help you with it, is it?

Nilufar: You bet! Could you ...umm, please?

Nasiba: Possibly, I can give you some directions.

Dialogue 2

Ravshan is in the evening class taught by Dr. Vino from America. She gave an amazing lesson to class. She said that anyone could go and ask any questions regarding the topic if there was any confusions about how to make a language proposal. So, Ravshan missed some points because he was feeling under the weather at that time. Hence, he decides to visit her in her office after class to clarify some points in his proposal. It is the first time for him to talk to Dr. Vino privately.

Ravshn: Good afternoon, Professor Andersen, I was wondering if you could possibly give some feedback what I wrote about my Language Proposal. Because I hardly got what you said in class today for the reason I was under the clouds.

Dr. Vino: Oh, my God. Umm, you know I was just about to go to dinner.

Ravshan: Oh, it is okey, then. Could you do it later after your dinner or ...?

Dr. Vino: Sure, no problem. I can.

Ravshan: Thank you very much. Have a good appetite, then.

Dr. Vino: Thanks a lot. See you

Follow-Up Activities:

1. Make up a dialogue in different situations using the phrases and certain structures from the pervious dialogues , keeping in mind the politeness, directness and formality.
2. Generate a role-play in groups:
Tom with two students shares one room in the dormitory. Tom is passionate about studying whereas the other two are coach potatoes and always sit in front of Magic box watching movies. This night Tom is hitting the books and preparing for his
- 4.

recent exams but his friends are watching TV loudly, which is hindering him from his studies. Tom goes and asks them.

REFERENCES

1. Cutting, J. (2015). *Pragmatics: A resource book for students*
2. Ishihara & Cohen, (2010). *Teaching and Learning Pragmatics: Where Language and Culture Meet*
3. Retrieved from https://m.youtube.com/watch?v=77184I_zQ9U



THE ROLE OF NATIONAL VALUES IN THE DEVELOPMENT OF INTELLECTUAL POWER OF YOUTH

Shohsanam Sharifboyevna Bobojonova

Lecturer, Shahrissabz branch of TSPU named after Nizami

ABSTRACT

The article reflects the impact of national values on the spiritual development of young people and the scope of research. The importance of national values in the spiritual education and intellectual development of young people is highlighted.

KEY WORDS: *value, intellect, potential, great ancestors, holy shrines, Oqsaroy, Registan, national games, national costumes, the concept of neighborhood.*

INTRODUCTION

“The ideology of the new Uzbekistan we are creating will be the idea of goodness, humanity and humanism. When we say ideology, we mean, first of all, the education of thought, the education of national and universal values. They are based on the life concepts and values of our people for thousands of years”¹.

Of course, we cannot imagine the future of our country without history. Uzbekistan is a great country with a great past. Great commanders such as Jaloliddin Manguberdi, Amir Temur, Mirzo Ulugbek, al-Beruni, al-Khwarizmi, al-Fargani, Ibn Sino and others, who were able to shake the world in our memory, contributed to the path of science. scholars, mystical Taliban such as Ahmad Yassavi, Imam Bukhari, Bahauddin Naqshbandi, and other ancestors are sealed for life. In order to be their worthy successors, we need to have a deeper and more complete understanding of the history of our youth.

As we get acquainted with the sacred places built in our country, in particular, the Oqsaroy built by Sahibkiran Amir Temur in Shahrissabz, Registan in Samarkand, Labi Hovuz in Bukhara, Ichan Qala in

Khiva and other architectural monuments. we seem to have fallen into the past.

THE MAIN FINDINGS AND RESULTS

In particular, the Oqsaroy was built in 1380-1404 by Amir Temur. This world-famous monument, 71 meters high, was built in memory of Sahibkiran's mother. To the roof of the house: "Whoever wants to see our glory, let him look at the buildings we have built." "The Registan ensemble is a unique monument of Central Asian architecture with its colorful tile ornaments, embossed roofs and huge domes. The official center of the ancient city of Samarkand is Registan Square, where three madrassas were built: Ulugbek Madrassah (1417-1420), Sherdor Madrassah (1619-1636) and Tillakori Madrassah (1647-1660). Registan is home to ancient science and education institutions and is one of the most prominent examples of urban planning in the East. In 2001, the three madrassas were inscribed on the UNESCO World Heritage List. Registan Square has historically been the city's scientific, political and religious center. The word "Registan" means "sandy place." In the Middle Ages, the centers in all major cities were called Registan. Squares of the same name were also located in Bukhara, Shakhrisabz and Tashkent. The square in Samarkand was one of the most majestic and admirable in Central Asia. This area has a history of several thousand years. During the reign of Amir Temur, Registan became the center of Samarkand. During the reign of Ulugbek (1409-

¹ President of Uzbekistan Shavkat Mirziyoyev chaired a video conference on January 19 on radical improvement of the system of spiritual and educational work, strengthening cooperation between state and public organizations in this area.



1447) the field became even more important. The modern Registan ensemble includes Ulugbek Madrasah (1417-1420), Sherdor Madrasah (1619-1636) and Tillakori Mosque-Madrasah (1647-1660). On the southern side of the Registan there were khanaqahs and mausoleums called "Childukhtaron" among the people. They were built by Kochkunchikhan (1527-1530) and added to the Tillakori madrasah. It was reduced to rubble after the 1904 earthquake, and in 1910 it was completely destroyed and replaced by a square. Tourists from all over the world come to see this Registan, which has seen its last appearance in 100 years."

The style is ancient and national, the majesty is pleasing to the eye, the patterns are beautiful, it can attract the attention of tourists, and for young people it can reflect nationality. What you see is different from what you see. Reading the works of our ancestors is the task of every young person today. The way of life reflected in them, through the information provided, the student develops such ideas as love for the Motherland, devotion to the people, confidence in the future. Not only the Uzbek people, but the whole country of Uzbekistan is a place of national values, ancient customs and traditions. It is the people who create them and leave their legacy. For example, wrestling, our national game, is not for young people who do not know chillak. These words are pure Uzbek words. It's also a good idea to play team games like "Flying", "White Poplar, Blue Poplar" in the spring.

It has long been known that clothes made of fabrics such as satin, adras, and silk were our national costumes, and this tradition continues today. Regardless of the age at which they are worn, girls, brides, young men and women show a certain form of nationalism. It is especially heartwarming to see girls with curly hair, Iraqi skullcaps, satin or adras dresses.

For our young people today, the formation of skills for the professions of doppi, embroidery, suzani sewing, spinning and carpet weaving, drying, sewing and cooking, for this purpose to establish and increase the activities of clubs also gives good results. Also, "Mahalla, administrative-territorial unit in Uzbekistan; a way of self-government inherent in the traditions and values of our people. The word "neighborhood" is derived from the Arabic word "mahal", which means "place of residence", "territory". The mahalla is also an active body in promoting national values. There are craft centers for young people, which teach pottery, jewelry, knives, wood carving and other national trades.

CONCLUSION

In general, no matter what national areas young people are taught, no matter what information they are given, the family is the main link.

So the family is the foundation of all the values, traditions and customs of a society. It is a key element in the formation of all national consciousness, national identity and national mentality.

REFERENCES

1. *A video conference chaired by the President of the Republic of Uzbekistan Shavkat Mirziyoyev on January 19 on radical improvement of the system of spiritual and educational work, strengthening cooperation between state and public organizations in this regard.*
2. *Timur's rules. / A. Temur. - Tashkent: Youth Publishing House, 2018. - 184 p.*
3. <https://meros.uz>. Registon ensemble - meros.uz
4. <http://www.manaviyat.uz>. Mahalla - a place of values - manaviyat.uz



THE PROBLEM OF AREAL STUDY OF DIALECTS

¹Olloyorov Quvondiq Madiyorovich,
²Madiyorov Shikhnazar Quvondiq oqli

¹Associate Professor, Department of Uzbek Linguistics, Philology Faculty, Urgench State University, Khorezm, Uzbekistan

²Student, Department of Uzbek Linguistics, Philology Faculty, Urgench State University, Khorezm, Uzbekistan

ABSTRACT

This paper deals with the study of three main dialects, Qarluq, Kipchak, Oguz dialects in terms of areal linguistics. Moreover, difference between the literary language and the dialectal language, the peculiarities of the main dialects, their major role in the ethnogenesis of the Uzbek people, linguistic features and phonetic aspects of the dialects were discussed.

KEY WORDS: *dialect, areal linguistics, literary language, dialectal language*

Area linguistics is one of the most important branches of linguistics, which draws conclusions on the basis of areal atlases, based on the branches of dialectology, linguistic geography. Areal linguistics is also a field that seeks to study the distribution of languages and dialects in certain areas, as opposed to political-geographical divisions.

The study of languages or dialects synchronously (in their current state) or diachronically (historical forms) in areal studies can also be the object of study of areal linguistic research. In the latter case, the isoglossa units also serve to study history, historical processes. The main task of areal linguistics is to describe the territorial division of language features and to interpret isoglosses. As a result, areas of interaction between dialects, languages, and areal communities (language unions) are identified [1].

There are commonalities and differences between areal linguistics and dialectology. The common denominator is that dialects are studied in both linguistic directions. It is only in dialectology that dialects are studied from today's point of view, in a living, practical way. At the same time, dialectal units go to the area where the dialectological study is to be conducted, collecting from street to street, neighborhood to neighborhood, and conclusions are drawn.

In the field of areal linguistics, the same dialect or subdialect is studied, not only in that area,

but also in the laboratory, based on the collected materials on dialectology, isoglosses are identified, maps are prepared. In addition, it studies not only the synchronous forms of a particular selected dialect (as mentioned above, dialectology works mainly with synchronous verification methods), but also its relations with past, historical forms, and other languages and dialects.

In dialectological research, another feature is usually taken into account. That is, dialects and subdialects that exist in a particular language and play a key role in the formation of that language are based on the geographical division and delimitation of the territory of that country. Areal linguistic investigations, on the other hand, bypass existing geographical boundaries and re-establish boundaries and linguistic atlases based on linguistic factors.

For example, in order to study the dialects of the Turkic languages, the borders and geographical divisions of the Turkic-speaking countries are secondary. Because languages or dialects develop on the basis of natural-linguistic laws, not on the basis of political and administrative events, one influences the other. Based on the opinions of scholars who have studied the range of Turkic languages, it can be said that a number of regions of Europe are now inhabited by Turkic-speaking and dialect-speaking people, and their languages and dialects collide with the languages of the area in which they live.

According to Gadzhdiyeva, who has



conducted research on the range of Turkic languages in the Caucasus, the migration of the Turkic-speaking population to the Caucasus took place in two stages:

1. VI - IX centuries. The migration flow during this period was mainly through the northern regions.

2. XI - XIII centuries. The migration flow during this period was mainly through Central Asia [2].

These facts can be confirmed by historical data. However, in our view, the resettlement of the Turkic-speaking population in Russia also took place during Tsarist Russia and the former Soviet Union. In particular, the deportation of the descendants of khans and aristocrats at the beginning of the last century, as well as the deportation of the descendants of the oppressed or obedient rich in the 1930s, should not be mistaken for another stage of migration. Although these historical events did not affect the change of Turkic languages and dialects in a particular region, in particular in Central Asia, they did have a certain influence on the Turkic dialects in the regions they visited or the lexical-grammatical structure of the owners of those Turkic dialects. It is natural that the database is affected.

Until the 1980s, only some of the Turkic dialects used in the Caucasus: Karachay, Bulgarian, Nogai, and Kumyk, were considered to have been studied to a certain extent. It is clear that other Turkic languages and their dialects have been studied to date, but to determine the common isoglosses of those Turkic dialects with dialects in the Central Asian region, to determine the dominance in the collision with other dialects. The study of the level of purity of the Turkic layer in the dialects studied is one of the issues facing its researchers today.

The dialects of Central Asia, especially in Uzbekistan, retain the valuable linguistic-areal linguistic facts contained in the Turkic languages. Tasks such as comparative-historical study of the linguistic factors of dialects related to the territory of our country with the existing Turkic languages in other parts of the world, identification of innovation centers of certain isoglosses, determination of irradiation are becoming more relevant in today's globalization.

After all, in the current socio-political situation, the solution of the above issues can also serve the unity of the Turkic-speaking countries, the common goals that serve the development of peoples from speaking Turkish. People who speak Turkic languages and their dialects can be considered to be present in almost all regions of Europe today: Greece, Italy, Germany, Poland, Hungary. A comparative study of the Turkic languages in those areas and the forms on the Asian continent, which is the center of their innovation, remains an

"undiscovered reserve" for linguists today.

But in order to do that, we first need to study our language and dialects in depth, to determine their internal interactions. Only then will it be possible to compare the dialects of our country with the similar languages and dialects of other areas.

Study of Uzbek dialects in historical-linguistic zones

Scholars have long been interested in the relationship between Turkic languages in terms of genetics and linguistic features. Mahmud Kashgari is mentioned in almost all sources as the first researcher of Turkic languages (more precisely, dialects of Turkic tribes) [3].

Interest in the features of Turkic languages began to revive in the late nineteenth and first half of the twentieth century. Several classifications have emerged. The goals and objectives of these classifications, as well as their methods, varied. While some of the classifications developed for the comparative-historical study of Turkic languages and dialects were based on carefully studied linguistic evidence, some were not without shortcomings in one way or another.

The dialects and dialectical (areas) of the Uzbek language differ. The areas of Uzbek dialects identified by our dialectologists constitute three major dialect regions of Uzbek dialects:

1. The territory of the Qarluq dialect.
2. The territory of the Kipchak dialect.
3. The territory of the Oguz dialect.

It should be noted that some scientific sources suggest that there are four major dialect areas in the Uzbek language, adding the fourth term "mixed dialect area" to the above-mentioned territorial division [4]. We have come to the above conclusion in view of the fact that this view has been expressed in earlier periods and that the tendency to record three major regional dialects has prevailed in recent studies.

The territory of the Qarluq dialect

Numerous European and Uzbek scholars have conducted research on the division of Uzbek dialects into areas. Among them are Russian linguists such as Sh.I.Zarubin, E.D.Polivanov, K.K.Yudakhin, A.K.Borovkov, V.V.Reshetov and many Uzbek dialectologists such as G.Olim Yunusov, Sh.Shoabdurahmonov, F.Abdullayev, A.Ishayev, N.Rajabov, B. Toychibaev and B. Hasanov can be named.

The Russian scholar E.D. Polivanov wrote in his book "Uzbek dialectology and Uzbek literary language": "... no other Turkic language differs so much between dialects as Uzbek. No other Turkic language has such a dialectal diversity. This makes it difficult to base any dialect on a literary language." Recent research has provided insight into some of the



features of Uzbek dialects, their phonetic and morphological similarities, and their different dialectal groups. As a result, attempts were made to classify Uzbek dialects according to their various characteristics. Almost all of the above-named scientists have formed their own classifications and achieved certain results in this area.

The Qarluq dialect has a special place among the Osh classifications. Scientific sources also state that this dialect plays a leading role in the formation of the Uzbek literary language. The Uzbek literary language is (conditionally) based on the Fergana-Tashkent dialects of the Qarluq dialect. More precisely, it is based phonetically on the Tashkent dialect and morphologically on the Fergana dialect [5].

The Qarluq dialect is named after one of the ancient Turkic tribes of the Uzbek people. A certain group of the Uzbek people, which bears the name "Qarluq" as a tribal name, is mainly located in the right tributary of the Amudarya, and some of them in Kashkadarya [6]. K. Shoniyozov's special monograph is devoted to the origin, history, economy and culture of the Uzbek snowfields [7].

According to N.A. Baskakov's classification, the Qarluq group of Turkic languages in the X-XI centuries has a high culture of Uyghur culture in the east and Turkic-Iranian culture (more precisely, Turkish-Tajik culture) in the west of Central Asia. It was formed as a result of the unification of the peoples by the Karakhanids.

The Uzbek-speaking population of the Qarluq dialect is the oldest stratum of the Uzbek people, a Turkic-speaking, non-tribal, sedentary urban and rural population of Central Asia.

Dialects are components of dialectal language. Each of them is distributed in a certain area and is characterized by complex linguistic features.

A dialectal language is a language that does not have a system of expression in terms of expression, which is distributed to all points of the language by territorial differences and includes certain dialectal areas. Dialectal language, by its very nature, is a complex, multifaceted whole, both general and specific, unifying and separable.

Literary language and dialectal language differ from each other as follows:

1. Dialectal language is characterized by a variety of regional distribution in terms of structure. Literary language, on the other hand, does not work in one area or another. Literary language is, in principle, common and unique to all the territories in which this language is located.
2. Dialectal language is more ancient than literary language, literary language is formed on the basis of one or more dialects.
3. It is known that the written form of literary

language originates from the oral language and gradually develops and spreads, but also affects the oral language. It even influences dialects that are the basis of literary language. For example, the Tashkent dialect is one of the basic dialects of literary language. But in this dialect the phoneme *f*, the possessive-person suffix *-miz*, the suffix of the accusative *-ning* do not exist. Under the influence of written language, the literary form of the phoneme *f*, the suffix of the accusative case, the possessive person-number suffix is assimilated into this dialect.

4. Literary language is distinguished by its universal character in functional relations. It can be used in all forms of language communication and expression. Nowadays, literary language is the language of culture, the language of science, the language of public speech. It is the basis of the language of fiction.

The function of dialectal language is much narrower than that of literary language. Dialectal language becomes the language of everyday communication in the family, between neighbors.

5. Dialectal language lives in strong connection with literary language. It changes under the influence of literary language, which in turn enriches the literary language. For example, Qarluq, Oguz and other dialects speak their own dialect when they come to Tashkent to study. Gradually, they enrich their lexicon with literary language words and grammatical forms. And when they go to their villages, they demonstrate it, and in that way they influence their neighbors to a certain extent. They never go back to their dialect for the rest of their lives, but always try to change it.

Also, before Abdullah Qahhor's story "Sinchalak" was created, the word "sinchalak" was used only in the Kokand dialect. The word was introduced into the Uzbek literary language by the writer Abdullah Qahhor, as a result of which the word, which came from the dialect, became the linguistic property of the entire Uzbek people and enriched the literary language.

The territory of the Oguz dialect

The role and status of the Oguz dialect in the Uzbek language is also high. One proof of this is that most of the dialectologists who classify Uzbek dialects mention dialects under the term "Oguz". That is, the Uzbek language has a special place in the structure of the Oguz dialect.

The population of this area is called the Uzbek Oguz people. According to academician Y.G.Gulyamov, the "Oguzs or Guzs" formed a large union of Turkic peoples and formed a nomadic empire in the VI century. According to S. P. Tolstov, in the X-XI centuries the term "Oguz" was used to refer to a union of tribes that spoke different dialects and belonged to the south-western group of Turkic



languages. During this period, the terms "Turk" and "Oguz" were used interchangeably.

Representatives of the Oguz dialect of the Uzbek language have been living in the soil of Khorezm, the lower reaches of the Syrdarya, the Aral Sea and the banks of the Amu Darya for a long time. They were famous for their developed urban life and farming culture.

Alisher Navoi in his *Majolisun nafois* calls the language of the Uzbek Oguzs "Khorezm Turkic language", ie the Khorezm dialect of the Uzbek language.

Linguistic materials about the Oguz group have long been in the focus of linguists. All areal features of dialects and dialects belonging to this group prof. We will not dwell on them, as they are described in detail in the works of A. Abdullayev. According to the investigators, the representatives of the Oguz dialect are Urgench, Khiva, Khazarasp, Khanka, Bagat, Yangiarik, Koshkopir, Shavat districts of Khorezm region; Dashoguz city, Dashoguz district and the center of Old Urgench district of Dashoguz region of Turkmenistan; in Beruni and Turtkul district centers and some villages of Karakalpakstan; in Mankent, Karamurt, Karabulak, Kyzylkishlak settlements of Sayram district of Shymkent region of Kazakhstan and in Ikan and Karnak villages of Turkestan district, as well as in Karakul and Alat districts of Bukhara region and in some villages of Vobkent, Bukhara districts and Forish district of Jizzakh region, and Asmansay, located in the villages of Baghdad.

Each of the dialect areas mentioned above is located in a separate area and consists of a group of dialects in a specific system. This means that a group of dialects in a system that has its own specific dialect area and common area features is called a dialect.

The Uzbek dialect is the language of all Uzbek dialects, ie the language of the three major dialects (Qarluq, Oguz, Kipchak).

The following are the peculiarities of the Oghuz dialect:

1. The presence of contrasting pairs of vowels (tamma, shamma, etc.).

2. Differentiation of short and long vowels, ie the existence of ancient Turkic long vowels, such as in Turkmen (at - animal, ad - name, o't - fire), etc.

3. The sound of the consonants t and k at the beginning of the word (dil - til, gal - kel, durmoq - turmoq, etc.).

4. Transformation of the suffix of **-ning** into the form **-ing** (as **bozoring** - bozorning, the **Khazarasping** olmasi - Khazarasping olmasi).

5. Representation of the directional agreement in the form **-a** (to'ya-to'yga, suva- suvga,

etc.).

The Oguz dialect of the Uzbek language is widespread in the Khorezm region. It is very difficult to determine the distribution of the Oguz dialect through the existing administrative divisions. Other dialects also live in the Khorezm oasis. In particular, this linguistic area is inhabited by people who speak Kazakh, Karakalpak, Turkmen and Tatar languages. This also creates certain difficulties in defining the Oguz linguistic zone in this area. The dialects of Yangibazar and Gurlan districts of Khorezm region, which are formerly Kipchak, belong mainly to the Oghuz dialect.

Sh.Egamberdiyeva noted that Oguzs also live in Alat and Karakul districts of Bukhara province; The Uzbek dialects of Forish district of Samarkand region are also inhabited by the Oguz-speaking population. In addition to the above-mentioned districts, in some villages of Vobkent, Romitan and Bukhara districts there are Oguzs. M. Mirzayev noted in his work that oghuz dialects of this type are in many ways close to the Khorezm Oguz dialect.

At the same time, representatives of the Oguz dialect live in the Uzbek-speaking population living in the cities and districts of neighboring Turkmenistan Dashovuz, in the center of the Old Urgench district in Beruni, Turtkul, Karakalpakstan, Shymkent, Turkestan, Kazakhstan. they speak the Oghuz dialect.

From an areal linguistic point of view, the Oguz dialect of the Uzbek language is characterized by the presence of common lexical and morphological features with several sister Turkic languages. In particular, the Oguz dialect has much in common with the languages of Turkic, Turkmen, Azerbaijani, as well as the languages of several Tuki peoples living in the Caucasus. N. Gadjeva's work "Characteristics of isoglosses in the Turkic languages of the Caucasus" provides a broad and detailed account of this [2]. According to him, many dialects in the Dagestan region of the Caucasus, as well as some dialects in Siberia, have in common with the Oguz dialect of the Uzbek language.

In addition, many studies have shown that in the language of ancient Turkic sources, as well as in some regions of Afghanistan, Iran, Azerbaijan and even Syria, as well as in some areas of Europe inhabited by certain Turks, there are dialects in common with the Oguz dialect. This, in turn, means that the linguistic study of the Oguz dialect has become more relevant in today's era of globalization.

The territory of the Kipchak dialect

It is known that any independent language, including Uzbek, is a combination of



different independent dialects. It was also mentioned above that Uzbek is the language with the most dialects in the world and many dialects that differ sharply from each other.

Kipchaks are a major component of the ethnogenesis of the Uzbek people. The Kipchaks took part in the formation of many Turkic peoples - Kazakhs, Kyrgyz, Karakalpaks, Turkmens, Tatars, Bashkirs, Altai and some peoples of the North Caucasus - Nogay, Kumik, Karachay. Kipchak, an ethnic element, was also part of the Ottoman Turks, Hungarians, and other peoples.

The Kipchaks in present-day Uzbekistan have gradually assimilated into the surrounding Uzbeks as a result of interference from ethnic groups. Ancient and old Kipchak inscriptions have been preserved to this day and are being studied in depth by archaeologists, ethnographers and linguists.

The Kipchak language, along with the Oguz, Bulgar, and Qarluq languages, belongs to the western Hunnic group of Turkic languages. It is located between the Qarluq and Oguz languages and is closer to the next one. The Kipchak dialect of the Uzbek language covers a large area and is composed of a group of Uzbek tribes. Kipchak dialects are available in all regions of Uzbekistan and abroad. These dialects include the corresponding phenomena of the general Kipchak area of the Uzbek language, forming dialect areas and groups of dialects, rather than individual dialects in their habitats.

The northern districts of Khorezm, mainly Gurlan, Yangibazar, and the Mangit and Kipchak districts of the Republic of Karakalpakstan, are inhabited by Uzbeks who are genetically related to the Kipchak group, with at least 20% of all districts in southern Khorezm up to 50% of the population. In particular, the majority of the population of Bagat, Shavat and Koshkopir districts is included in the Kipchak dialectal zone as an area zone and in terms of dialectal features present in the region.

These Uzbeks, whom we conventionally call Kipchaks, may have moved from the Aral Sea to the south of Khorezm in the last 350-400 years for various political and economic reasons. In addition, the Kipchaks make up 60-70% of the population of the Turtkul and Beruni districts on the right bank of the Amu Darya [9].

Ethnic composition and formation of Kipchak tribes were clarified in historical sources such as "Abdullanoma", "Tarihi salatini mangitiya", "Devoni lug'otit turk", "Jome at-tavorix", "Ravzat us-safo", "Zafarnoma", "Boburnoma", "Shajarai turk", "Shajarai tarokima", "Shayboniyoma". It is covered in

detail in the scientific researches of Russian and Uzbek scientists such as M. G. Vahobov, B.Akhmedov, K. Najimov, K. Shoniyozov, V.V. Bartold, V.V. Radlov, N. A. Aristov, I.I. Zarubin, I.I. Grigoryev, Gozi Olim Yunusov, N. V. Khanikov, Y. Yakobovskiy, V. M. Vyatkin,.

Dialectological sources provide conclusions about several linguistic features of the Kipchak dialect. In particular, some phonetic aspects of the Kipchak dialect are as follows:

1. The presence of contrasting pairs of vowels (**u/ ü; i/ ĩ; o'/ ö**), as in the Oguz dialect, and as a result the preservation of synharmonism;

2. Diphthongation of middle vowels at the beginning of a word: (**i/e; u/ ü; o'/ ö; e/i** etc.) (**ikki/ekki, tegdi/tiydi**);

3. The transformation of the phoneme "y" at the beginning of a word into "j", that is, the phenomenon of j-formation, is also characteristic of this dialect (**yig'moq/jiyimoq; yaman/jaman**, etc.);

4. The addition of the consonant "x" at the beginning of a word (**ayol/xayal; ari/xari**, etc.).

Some peculiar morphological features of the Kipchak dialect are also mentioned in dialectological sources. Including:

1. The exchange of n / d / t sounds in the affixes of the consonant and the accusative. (**-ning/-niñ/-diñ; -tiñ/-ti; -ni/-ni/-di; -ti/-ti** and others);

2. The form of the personal pronouns is expressed in the form **mag'an, sag'an, ug'an**;

3. The formation of the present continuous verb with the affix **-jatir**: as **barajatir, kelajatir**;

4. The future tense adjective is formed by the affixes **-tgan // -tuvin**: **kelatgan, baratuvin**.

A lot of work has been done in Uzbek dialectology on the linguistic features of the Kipchak dialect of the Uzbek language. A. Ishayev studied the Uzbek dialects of Karakalpakstan in detail and added to his monograph a dictionary of 5,000 words on the lexicon of Oguz and Kipchak dialects in the region.

It is known that in the southern regions of Khorezm in some districts live the Kipchak dialect of the Uzbek language. Their language has not gone unnoticed. Linguist H. Boboniyozov defended his dissertation on the phonetic and morphological features of the South Khorezm Kipchak dialects.

E. Urazov conducted a monograph on livestock terms in Uzbek dialects in Southern Karakalpakstan. R. Yuldashev, Associate Professor of Uzbek Linguistics, UrSU, defended his dissertation in 2002 on the lexical features of Uzbek dialects in Dashoguz region [10].

In recent years, due to the high level of scientific and technological progress, as well as the high-precision processing of linguistic research, many linguistic aspects of these dialects have been redefined. It should be noted that some studies



conducted in the last century have shown that the data are outdated and are not defined by the real environment.

Despite the above considerations and research, we have not had much to boast about in the area study of the Kipchak dialect. Areas where the Kipchak dialect is spoken should be examined not only in Uzbekistan, but also abroad. The inspections were mainly limited to the territory of our country.

Linguistic areas that retain these linguistic features are found in neighboring countries, as well as in many areas inhabited by Turks, and the task of studying them, working with real zones, presenting original linguistic research awaits its researchers.

REFERENCES

1. Nurmonov A. *Selected works. Volume 1* – Tashkent: Akademnashr, 2012. –P.205.
2. Gadjeva N.Z. *Turkic-speaking areas of the Caucasus.* –Moscow: Nauka, 1979. –P.6.
3. Toychiboev B., Hasanov B. *Uzbek dialectology.* – Tashkent: A.Qodiriy National Heritage Publishing House, 2004. –P.26.
4. Shermatov A. *What is linguistic geography?* – Tashkent: Fan, 1981. –P.45.
5. Ashirbaev S. *Uzbek dialectology.* –Tashkent: TDPI edition named after Nizami, 2013. –P.31.
6. Karmysheva B.X. *About some ancient Turkic tribes in the composition of Uzbeks.* –M. 1962. – p.131.
7. Shaniyazov K. *Uzbeks-karluks.* Tashksnt, 1964.
8. Gulomov Y.G. *History of irrigation in Khorezm.* –Tashkent, 1957. –p.129.
9. Abdullaev F. *Khorezm dialects.* - Tashkent: Publishing House of the Academy of Sciences of Uzbekistan, 1961.
10. Yuldashev R. *Lexical features of Uzbek dialects in Toshovuz region.*NDA. - Tashkent, 2002.



THE ROLE OF FEEDBACK IN TEACHING ESL CLASSES

¹Sapaeva Bibijon Rustamovna, ²Gayratova Sarvinoz Dadaboyevna,

³Rajapova Navbahor Narimonovna

¹Teacher, Foreign Philology Faculty, Urgench State University, Khorezm, Uzbekistan

²Student, Foreign Philology Faculty, Urgench State University, Khorezm, Uzbekistan

³Student, Foreign Philology Faculty, Urgench State University, Khorezm, Uzbekistan

ABSTRACT

This article gives information about the significance of giving feedback to ESL students and discusses advantages and disadvantages of teacher and student feedback during the learning process. There are some suggested methods for how to provide learners with an effective feedback which may help them to improve their language acquisition.

KEYWORDS: *effective feedback, directive and facilitative feedback, methodology, language production, evaluators, professional feedback, teaching approach, language behavior*

For a long period of time feedback has been playing one of the principal role in methodology. A number of ESL teachers consider it as a powerful tool to guide the students in learning process. In other words learners may improve their language production with the help of the feedback given by their teachers.

As many students face some difficulties while learning English as a second language, it is mostly preferred to provide them with written feedback. According to [1], "providing feedback to students is often seen as one of the teacher's most important tasks, offering the kind of individual attention that is otherwise rarely possible under classroom conditions." Therefore, more feedback means more guidance which may enhance the ESL students writing skill quickly. They can receive both positive and negative comments during the classes. Dudley-Evans as well as St John [2] state that in the beginning of written feedback it is necessary for pedagogues to mention about particular achievements in learning process and then they may provide a detailed reference of negative features in student's language acquisition. Obviously, it may help them to

create a positive atmosphere for learning second language.

In ESL classroom learners differ from each other with their personality. In this case teachers ought to be responsible to select an appropriate feedback response that will not discourage a student's learning. In other words, it is vital to approach each student individually. There might be some sensitive learners who can consider feedback as a criticism towards their language performance. Consequently, they may become passive participants during the class since they lose confidence in the ability to learn. In methodology it is widely suggested to take student's feelings into consideration for the purpose of encouraging them to show positive results in their study.

The way a feedback is presented has a major impact on a learner's further improvement and development on that subject. Teachers should be extremely careful before correcting their learners in order not to cause any misunderstandings between them and their students. According to Marzano [3], a feedback which concentrates on only what is right or wrong may carry a negative impact within it that may lead to a 3 percent reduction of learning achievement.



Regarding the another feedback giving approach that focuses on explaining the reasons of incorrect or correct answers has a positive influence on learners which increases the learning achievement by 8.5 percent. Additionally, this number may be taken to 20 percent when there is a discussion involved on a given feedback and its reasons to be right or wrong. According to the approaches above it can be noticed that the improved teachers standards lead to an improved students learning achievement.

It should be noted that in some cases feedbacks are not received positively by students or learners, hence teachers may face a bit of fear and hesitation while presenting their feedback. Since people's response to criticism varies there is a likelihood of confusion to appear concerning the given feedback. On occasions, learners tend not to feel responsible enough to learn from their mistakes and discuss face to face about the feedback (negative) they are given. Nevertheless, a variety of defensive reactions can occur, and it is important to learn some strategies for dealing with them. It is not only the receiver of feedback who can become defensive: the person giving the feedback can also manifest similar reactions. [4]

By this statement it can be understood that teachers' trying to resist on proving their feedback on most occasions only intensifies the situation. Instead, teachers can use other ways and methods to overcome any negative conversations on a presented feedback and the effective usage of these methods may even lead to more preferable correlation between the teacher and learner.

In most European countries it is advocated by evaluators that an occasional feedback from learners may have an influential role in their significant correlation between them. Teachers may receive feedback from students in various ways: it might be either in oral or written form. OECD's (2013) report "What Makes Schools Successful" states that student's feedback about teacher's practice may have an important contribution to formative processes of school evaluation. The research found that schools where students are eligible to provide a written feedback about school systems, teachers or resources tend to be more equitable. However, in that study it is claimed that student's feedback can aid to find out certain problems but it should not be considered as a relevant professional feedback. From the statements above it is obvious that feedback from students may have noticeable influence on the efficiency of educational standards at some institutions.

On the other hand, however, teachers can be also less determined by some of students' opinions since students might be too critical of their teaching approaches and techniques. Moreover, students can feel uncomfortable to open up their thoughts or be

reluctant to do such observation. In some educational institutions students write a self-reflective essay. Learners are suggested to write down all their estimations related to their teacher's methods as well as experience. It is not part of their course evaluation. It means that students are just asked to reflect on what they have learned and experienced in the course in order to help improve the course, including the teacher's performance in the course. However, it is advisable to provide students with a few guiding questions in order to make it explicable for them to write a clear reflective essay.

Hesketh and Laidlaw [5] point out that there are a number of barriers of providing an effective feedback that hold back teachers to feel free while stating their opinion or pointing at student's weaknesses. The most common hesitations teachers may have about giving feedback is having a fear of hurting students' feelings. In some cases, the act of giving feedback has a tendency of causing misconceptions and confusion between the feedback giver and feedback receiver.

According to Black and William [6], we can divide the roles of the feedback into two: directive feedback and facilitative feedback. The former one concentrates on helping the students to get on the right track by giving them feedback, whereas the latter one focuses on giving direction as well as boosting their learning experience. It is crucial to approach to one of these types of feedbacks thoughtfully, since it has a major impact on a student's confidence when it comes to receiving the feedback the next time. Nor carefully chosen words while stating the feedback may lead the student to hesitate in his progress or even make them want to give up. In order not to make it happen teachers should be highly considerate before giving the feedback.

There are many types of feedbacks we have covered in this paper which can be applied by teachers and educators. But, one thing which should not be overlooked is exploring the most effective and practical one. While we are searching for a better way of presenting our feedback we should consider its benefits both for our students and learners as well as for us, because we improve our teaching methods by improving our learners language learning ability and comprehending. By providing a learner with a feedback targeted at improving his language skills we may trigger in them a desire to be better and develop their abilities in studying more effectively. Thus, several methods should be practiced by a teacher to identify the exact one method that is the most adequate. Concerning on how to choose the appropriate one, we should take into account the cases with grammar errors, mistakes in vocabulary or word choice, fluency and pronouncing the words



correctly. Teachers should present their feedbacks considering the subject of the mistake (if there is one) and approach to that confusion as carefully as possible so that a learner does not get that feedback negatively but could find out the point he has got wrong.

In methodology, it is considered that there is a noticeable difference between error correction and feedback since both of them are targeted in two different ways. In other words, some teachers may use feedback in order to give a general reaction to learners' performance while correction is preferable to mark faulty language behaviour. However, most researchers prefer to merge both error correction and feedback and apply the phrase "corrective feedback" in evaluation. It means that teachers can use the method of error correction which is aimed to guide students to the right way by providing with clear response to students performance and correcting their mistakes during the learning process. In short, it depends on teachers preference whether to unite both error correction and feedback or not, but the main point is to assess learners language behaviour in effective way to enrich their learning productivity.

To sum up, one of the highly important trait of any teacher, educator or instructor is being capable of presenting constructive feedback whether it is formal or informal, oral form or written form. The core element of giving feedbacks to learners is to develop their comprehension and boost the language learning skills. Alongside with this, giving an effective feedback impacts the relationship between a teacher and a learner which can strengthen the bond they have or vice versa loosen it. Especially, the method applied in giving feedback has a major role to play in student's further motivation to learn. The most significant thing to keep in mind is that it is not the case to give feedback with the only purpose of pointing to weaknesses but also praising the strengths of a learner. Since the aim of giving feedback is to help the learners to see their signs of improvement in their studies and make them believe or see that their effort was not pointless.

REFERENCES

1. Hyland K. (2006). *English for Academic Purposes. An Advanced Resource Book*. London: Routledge.
2. Dudley-Evans, T., & St John, M. J. (1998). *Developments in ESP. A Multi-Disciplinary Approach*. Cambridge: Cambridge University Press.
3. *Classroom Assessment and Grading That Work*. Marzano, Robert J. 2006 by the Association for Supervision and Curriculum Development (ASCD).
4. *Giving feedback*. Jennifer King. (Published 26 June 1999).
5. *Developing the teaching instinct*. E A Hesketh, J M Laidlaw Med Teach 2002 May.
6. *Assessment and Classroom Learning*. Paul Black & Dylan Wiliam. Published 28 Jul 2006



FURTHER ENHANCEMENT OF NATIONAL IDENTITY OF YOUTH: PROBLEMS AND SOLUTIONS

Baykabilova Pariozod Amanbayevna

Senior Lecturer, Department of Philosophy and National Idea, Tashkent State Technical University, Tashkent, Uzbekistan

ABSTRACT

This article provides problems on the importance of enhancing the national identity of youth and their solutions. Moreover, criteria of national self-awareness, suggestions and recommendations further increasing youth national identity were given. The idea that awareness of national identity is the perception that a nation and the representatives of each nation belong to a common cultural basis, language, culture, historical heritage, psyche, customs and traditions, and their place were substantiated.

KEY WORDS: *national identity, problem, solution, self-awareness, culture, historical heritage*

One of the important conditions for strengthening independence is to improve ideological education. That is why our national ideology is in need of active participation of young people in the development of today's civil society. On this basis, it will allow young people to think freely, create the foundations of the rule of law, form in our compatriots a sense of loyalty to their people and homeland, educate them in the spirit of patriotism, create practical and spiritual means of building our statehood. In this regard, there is an understanding of the identity of the nation through the study of the historical experiences of our ancestors, lessons learned from their exemplary work, the formation of a worldview based on universal values.

At the present time, the conflict of different ideologies is becoming more acute, in which case the internal and external spiritual and ideological threats may intensify and undermine the understanding of national identity [1]. How are the ideological threats against the development of our country and the understanding of the national identity of our people manifested today? In our opinion,

-First, the existence of efforts to restore the Islamic caliphate and unite the Muslim peoples under its banner into a new empire;

-Secondly, the absence of forces that seek to reunite the states that have gained independence, strengthened it and embarked on the path of development, into the former union;

-Thirdly, those who try to falsify our history, our national values and the essence of religion;

-Fourth, attempts to spread filth and corrupt the people spiritually;

-Fifth, efforts to provoke regional and interstate conflicts through various ideological means.

As President Sh.M. Mirziyoyev noted, the most widespread threat in the world today is the protection of our youth from various threats, such as drug addiction, religious extremism, missionary work, and we must never forget that we are responsible for these [2].

A legitimate question arises: What to do for this at this point? In our opinion, the answer to this question is to achieve an understanding of the national identity of our people and the formation of ideological immunity. Where the level of national identity is weak, it is difficult for the representatives of a nation to unite in the pursuit of certain common goals. The tendency of the nation to separate is growing. Within the nation, such vices as racism, gangsterism, and localism are on the rise. The weakness of the understanding of national identity stems from the low level of national consciousness and pride, the inability of the representatives of the nation to realize that they belong to an ethnic unit with the same history and destiny.

The development and improvement of national identity is an objective process. It is an important factor in determining the nation's 'I' and



serving to ensure its identity. There will be no future for a nation deprived of it. Its representatives will eventually become spiritually poor, mangled. There are many examples in history of this tragedy that confirm this terrible historical fact. Doctor of Political Sciences V.Kuchkarov analyzes the meaning of the concept of "national identity" with the concept of "self-awareness" and explains as follows: "Self-awareness is the knowledge of one's place in existence, one's "I" in social relations and other "I" and perception of their individual aspects, which are manifested in their relationship with life goals". A certain level of self-awareness is the understanding of national identity.

Awareness of national identity is the perception that a nation and the representatives of each nation belong to a common cultural basis, language, culture, historical heritage, psyche, customs and traditions, and their place. There are its own criteria of national self-awareness, which are mainly:

- a) Understanding of the unity of the land, country, homeland in which the individual was born and raised;
- b) Deep knowledge and respect for their mother tongue;
- c) Comprehensive assimilation and preservation of their national culture and spiritual heritage;
- d) Regular study of their history [3].

In our opinion, the formation of ideological immunity is a phenomenon consistent with the criteria listed above. As a result of the understanding of national identity, the nationality and national characteristics of the people are revived and strengthened, their concern for the fate and future of the nation increases, and living with the pain of the whole nation becomes the meaning of their lives. The issue of the formation of ideological immunity is considered in close connection with the understanding of national identity. They are a legitimate phenomenon that operates in a dialectical unity, mutually reinforcing. Ideological immunity can never be formed without an understanding of national identity.

Understanding of national identity is an expression of generalized theoretical views and practical actions aimed at protecting and developing the material and spiritual values and interests of the nation, ensuring national unity and solidarity, understanding the belonging to a particular ethnic unit, the nation-state, its duties and responsibilities. "The main force that drives this process is the understanding of the nation's identity [4], while the main source that provides it with energy is national spirituality" [5].

While national spirituality is seen as a source of energy for the realization of national

identity, ideological immunity serves as a mechanism that protects it from various harmful and alien influences. The encyclopedic dictionary of philosophy states that "ideological immunity is useful in educating the spiritually mature, strong-willed, faith-loving whole person, in educating young people who can withstand any reactionary, destructive ideological initiatives" [6]. When a baby is born, he does not know how to protect himself from heat, cold, external mechanical influences. Conditioned reflexes of self-defense appear gradually, during growth. As a result, by adolescence, the adolescent will have all the skills of self-defense. The dangers that threaten a person's spirituality and the ability to consciously protect themselves from them are formed through education, parental advice, seeing and knowing good and evil, and learning from reality, creating a healthy, confident, strong sense of national identity in every nation. That is why, in the words of our first President, "we must bring up a healthy generation. When we say a healthy person, we mean not only physical health, but also a person who has matured in the spirit of oriental morality and universal ideas." [7] A person who has matured in the spirit of Eastern morality and universal ideas makes it his life's goal to "stray" from the right path, to go astray, and then to regret, to be unhappy, and to save the nation from disintegration, division, class, local or other divisions. In a word, this is the ideological immunity to reality.

Ideological immunity is the spiritual unity of the state and the nation, it serves as an ideological shield that protects the spiritual health. So what makes ideological immunity? First and foremost, it is decided by knowledge and the people's understanding of national identity. According to Ahmad Yugnaki, an intelligent person is inseparable from knowledge, and knowledge is inseparable from an intelligent person. It is necessary to look for the cause of all ignorance in the human being, of all the inconveniences in his daily practical activity, from ignorance.

Ideological immunity does not manifest itself spontaneously. For it to manifest, there must be an internal, external ideological, intellectual influence. When a person is faced with a new, unfamiliar idea, proposal, or has to choose one of two ways, he "examines" them in his own interests. In this situation, the right choice of young people will depend on their knowledge and worldview. To do this, it is important to promote reading among young people, to instill in them a love for books. In this regard, the head of our state said, "We talk a lot about changing people's minds, worldviews, raising their spiritual level. But isn't the book the simplest and at the same time the most influential tool in this regard? I am convinced that without books, progress



and high spirituality cannot be achieved. There is no future for anyone who has not read a book, nor for a nation.” [8]

In conclusion, it should be noted that the current socio-political, spiritual and cultural potential of our country, its economic situation, the intelligence and will of our people, its ability to bring up a healthy, harmoniously developed generation create a free, prosperous and happy future. Therefore, today it is necessary to work actively to bring up a harmoniously developed generation worthy of a great state, to cultivate them as spiritually mature, physically strong, enlightened, highly qualified personnel and, most importantly, as individuals with ideological immunity who understand national identity.

The following suggestions are recommended for further increasing youth national identity:

- Development of differential pedagogical and psychological programs in educational institutions that help young people and students to realize their identity by assimilating national and moral qualities in accordance with their age;

- Effective use of sources in textbooks, manuals that reflect the national and moral qualities, values, heritage of our ancestors;

- Raising the level of spiritual and moral education in educational institutions to the level of today's requirements, the organization of various cultural, political and social events that affect the worldview of young people;

- Deepening the spiritual and moral knowledge of teachers, the use of historical sources that form national pride in conveying the secrets of their science to young people;

- Conducting roundtables and meetings with young people with leading, exemplary, ie modern heroes of various fields;

- Taking into account their age and psychological characteristics for the development of spiritual and moral qualities;

- Being able to choose the means and methods of education appropriate for the young age, the methods of psychological influence;

- In the formation of national self-consciousness of young people, it is very important to visit the holy shrines, organize trips to historical sites, to get acquainted with the folklore.

The goals and objectives of the system of issues of developing students' understanding of national identity, deep respect and reverence for national values and traditions, universal values, the manifestation of youth national identity and a sense of responsibility for the fate and future of our country, strengthening ideological immunity against foreign ideas, are as follows:

- formation of a future professional who is loyal to his profession, highly cultured, intelligent, socially active, patriotic and civic;
- facilitate the spiritual, intellectual and ideological development of young people;
- educate them in the spirit of patriotism, citizenship, tolerance, respect for the law, national and universal values, strong beliefs and views on life;
- raising the level of legal awareness and legal culture of young people and the formation of competitiveness in their field;
- support of gifted and talented young people and their moral support based on universal values;
- support of promising projects, strengthening the role of the family in educating young people;
- to make full use of the opportunities of such a time and place in the national history, to embody them in the memory of future generations as people who lived and gained such an opportunity;
- full understanding of the content of peace and prosperity in the future;
- spiritual education, understanding and careful preservation of the essence of our sacred religion and its essence.

Areas of organization of the development of young people's understanding of national identity, deep respect and reverence for national values and traditions, as well as universal values:

1. In-depth analysis and promotion of the works and speeches of President Mirziyoyev to develop in young people a sense of national identity, deep respect and reverence for national values and traditions and universal values.

2. National and universal values, explanation of their essence, restoration of national values during the years of independence and understanding of the role of national and universal values in building a humane, just democratic society.

3. To widely promote the fact that traditions are an invaluable spiritual wealth created in the process of historical formation and development of the nation and passed down from ancestors to generations as a sacred heritage.

4. Explain that the preservation and development of the cultural heritage, which has become one of the main symbols of the nation, is a sacred duty for every generation.

5. To form in young people an understanding of national identity, a deeper vision of language, culture, history and the future, the idea of putting human rights and freedoms above all else.

6. To teach young people new ideas, new ways of thinking, to develop a sense of national



identity, deep respect and reverence for national values and traditions and universal values.

7. Respect for our great ancestors, increasing interest in the study of their rich scientific heritage.

8. Acquaintance with scientific and artistic works published in different countries of the world about their life and activity, monuments erected in memory of our great ancestors.

9. To study the life, work and activities of outstanding poets and writers, philosophers, scientists and statesmen of Uzbekistan as objects of national pride.

10. To consider the family institution in Uzbekistan, the relationship between parents and children as a unique value, hospitality, generosity, empathy for others as an important spiritual factor in the sustainable development of our society, their careful preservation and transmission from generation to generation.

11. To study, appreciate and preserve the unique nature of our homeland, to decide on the emotional and psychological relationship based on the view that nature is not only a source of raw materials, but also the basis of social and cultural development of mankind.

REFERENCES

1. Koksharov N.V. *Dialogue of culture and ethnopolitics. Bibliographic description of journal articles.* - SPb: Nauka, 2001. - p. 54.
2. Mirziyoev Sh.M. *From national revival to national uplift. Volume 4 T.:* Uzbekistan, 2020. - p. 96.
3. Kochkarov V. *Abstract of the dissertation for the degree of Doctor of Political Sciences, political and philosophical analysis "The problem of understanding national identity in the process of democratization of socio-political life of Uzbekistan."* - T. : 2009. 12-p. 2.
4. M. Alimova, M. Tyumenova, J. Hasanov. *Social activism in the process of national identity - "The formation of the mind, heart and worldview of young people is a topical issue today", Gulistan, 2006, p. 106-132*
5. Otamurodov S. *Globalization and national-spiritual security.* - Tashkent: Uzbekistan, 2013.45 pages.
6. *Philosophy: encyclopedic dictionary: (Compiler and editor-in-chief K. Nazarov).* - T. : Sharq Publishing and Press Joint Stock Company General Editorial Office. 2004, p.160
7. Karimov I. A. *Understanding the value of the people. From the speech at the first session of the Oliy Majlis of the Republic of Uzbekistan // On the way to spiritual growth.* - Tashkent: Uzbekistan, 1998. Pages 5-6. - 132.
8. Mirziyoev Sh.M. *We will build our great future together with our brave and noble people.* - T. : Uzbekistan, 2017. 114- p.



PROBLEMS WHICH OCCUR IN TRANSLATING AND THEIR SOLUTIONS

Razakova Shakhnoza Dusmamatovna

Teacher, Languages Department,

The Chirchiq Higher Tank Command and Engineering School, Chirchik, Uzbekistan

ABSTRACT

This article addresses some of the common problems that arise in translation studies. It also outlines the current demand for translation studies and its place in society. This article pays great attention to the transformation and equivalence that occurs in translation. In addition, the effective evaluation of the translation from a critical point of view is considered in order to improve its quality.

KEYWORDS: *translation, translation studies, general theory of translation, intercultural communication, social nature of translation, equivalence translation, language norms.*

Today, modern globalization and the rapid development of intercultural relations, the expansion of international relations, the development of trade, economic and financial ties between countries, the intensification of the integration process of European countries and the world, the development of science and technology, scientific and technical information. The importance of foreign languages as effective factors of organic exchange is of great importance. Also, at the stage of economic, scientific, technological and cultural development, a foreign language is widely used as a means of oral and written communication between different peoples of the world. This is due to a number of global socio-economic and political processes. Translation can be considered as a means of interlingual communication, ie language mediation, if one original text is translated into other languages, the full equivalent text in the translated languages is communicative-pragmatic and A.V. Fiyodorov [1], a well-known translator and founder of literary theory, states: "Translation means the correct and complete expression of a previously expressed text in one's own language, according to the requirements of another language." It should be borne in mind that the general

theory of translation deals with the study of translation activities, and the object of study is texts in various functional styles. Some of its rules can be developed on the basis of translation of literary works, although others have already been considered outside the functional-methodological typology of texts of modern literary languages, as they belong to one of the types of art - word art or fiction. Artistic text is a text of fiction created as a result of human creative activity, using existing language tools. Y.P.Solodub gives the following definition: "artistic text (text of a work of art) - it performs the main function of having an aesthetic effect on the reader or listener"[2]. Another definition of it is true: "a literary text is a general ideological and thematic content and a very important unit that has an aesthetic effect on the reader - its main function is." The specificity of a work of art, from epithet and metaphor to the rhythmic and syntactic structure of a phrase, it has a figurative and emotional impact on the reader achieved through a variety of means. The literary text gives the author ample opportunity to freely depict the passage of time and to create various semantic and stylistic effects. Consequently, the translator is forced to choose carefully the methods of



conveying many artistic details, interpreting them in such a way that the artistic effect of the translation occurs after reading the original and is equivalent to the artistic impression reflecting the individual style of the author. Thus, the translator creates a new text in the target language and does not duplicate the original text. It is important to keep in mind that many factors influence text comprehension, including culture, subtext, national characteristics, life, and more. Therefore, in order for the translated text to have the same reading ability, the translator adapts it to these conditions, i.e., interprets the text units of the original at different levels. The loading must be the same in both texts of the work of art.

The role of compression in the translation of texts

Today, the manifestation of compression in the field of word formation is a less developed field, and the semantic essence of the process of compression during word formation is less studied. In addition, one of the problems in the grammatical structure of a language remains the ellipse. When translating from English to Russian, from Russian to English, the problem of compression inevitably arises. It is impossible to translate text without compression. In English, compression is expressed at different levels. In the grammatical system, word formation, and the use of lexical units, linguistic compression can be seen as a characteristic phenomenon for English, especially when comparing the two languages. The process of compression has attracted the attention of many researchers. Although the term appeared in linguistics in the middle of the twentieth century, the existence of compression and decompression, as common phenomena in translation, became clear at the beginning of the XXI century. The concept of compression has not yet been clearly explained by linguists. In general, in the works of many authors can be found descriptions of different compressions of about 20% at different levels. In addition, according to the definition of such phenomena as contraction, compression, merging, as well as substitution, addition, contraction, elongation, dropping, etc., it is possible to distinguish about 10 definitions of the ellipse. A review of the modern linguistic literature shows that there are two broad and narrow compressions in text linguistics. Compression in the broadest sense is considered from a general methodological point of view and is described as one of the main directions in the activity of language, it moves across the scope of activity, but more or less intensively in various specific

communicative areas. appears in accordance with the functional style. Compression in the narrow sense is a set of specific tools that serve to perform compression in the broadest sense at the level of all languages. Although the models of compression of words in modern English are an effective tool in the mechanism of compression of the text, they are not fully understood in this regard. All this leads to the fact that this topic is not fully developed in linguistics and contributes to its development. Insufficient development of semantic and communicative functional aspects of linguistic compression is explained by the lack of consensus among scholars on the nature of compression. In addition, the relevance of the article is related to the current state of society, in which the constant growth of information flow encourages linguists to study the most economical ways of speech signal, which facilitates the exchange of information over and over again. Through the functional use of units and structures in the process of communication, their true informational significance is revealed, as well as the presentation of a general conceptual analysis of the compression of the literary text, with many contradictory and specific approaches.

In order to achieve the goals of applying compression in the text, it is necessary to solve the following problems:

- to consider different views on the nature of linguistic compression, the history of its origin;
- monitoring the interaction of compression and related events;
- based on the theory and practice of modeling literary texts, consider different models of compressed word formation;
- identify types, methods and means of compression.

In accordance with the objectives of the study, the following tasks were identified:

- an acceptable method of transmitting information expressed in one language through another determination;

The following methods were used to perform the tasks:

The method of tariffing is a method of direct linguistic observation and description, the distributor is the distribution of this element in speech and context, as well as comparative-historical, comparative methods, quantitative and qualitative analysis, search in the text.

The following methodological principles of the use of compression in text translation is based on:

- 1) a systematic approach to learning a particular language;



- 2) analysis within a single functional method;
- 3) synchronization of translation;
- 4) consideration of extralinguistic factors;

The theoretical significance of this article is that it contributes to the study of the linguistic state of literary text compression, as well as the development of technology for the transmission of text in a translated language, the application of the results in all fields of humanities and technical knowledge. Linguistic compression is a common case of the principle of saving in language. In oral speech, on the one hand, the tendency to save language means is proportional, and on the other hand, there is a tendency to redundant elements. Trying to save the language in a certain communication mode and the presence of a large excess in the language can be considered as the reasons and grounds for the manifestation of language compression in order to compress this or that text. As a method of compression, substitution and omissions perform slightly different functions in sentences of literary text. Their core is to prevent duplication and compression of the text. Speaking in the language of fiction as occasionalism and using telescopic words to individualize the speech of the protagonists of works of art is one of the most effective ways of word formation in the last decade.

Abbreviations in works of art can also come as forms of authorship. The main function of abbreviations is to look for a name, a necessary function name, sometimes a bright and memorable name. In addition, abbreviations markers successfully introduce a person to a particular society, as well as its stylistic role. Abbreviations also serve as a substitute for short words. According to the relatively recently compressed noun + noun model, a new type of formation has emerged. The mechanism for creating such structures differs from the mechanism for forming abbreviations: in this case, in addition to the abbreviated transformation, the attribute is reduced to capital letters. secret - a compressed unit is attached to the determiner with a dash, which results in the formation of an independent lexeme (word). In fiction, there can also be compression on the basis of phraseological units, if one word does not change the structure of the whole phrase. The emergence of this type of formation is accompanied by analytical trends in English, in particular, with the growth of word order in the sentence - when the syntactic position determines the attributive ability not only of individual lexical units, but of whole phrases. Linguistic compression as a specific linguistic phenomenon, a certain part of the text and its content occurs when it is possible to reduce

without significant damage to The problem of accurate transmission of information from one language to another is relevant not only in linguistics, but in all areas of science. It is impossible to translate without the ability to compress the text.

Compression has been actively used in translation practice for many centuries as a means of saving language and the means to express the same content. The theoretical foundations of this linguistic phenomenon appeared in the second half of the twentieth century.

The phenomenon of compression is closely related to the concept of implicit. closely related to the appearance of In terms of redundancy, the optional message component is compressed when processing and receiving data. Analysis of literary texts allows us to conclude that syntactic and lexical compressions are the two most common types of compression in the language of fiction. Syntactic compression of a literary text is the widespread use of one-syllable sentences, in the naming of process and action, in the use of auxiliary words that serve as substitutes and fully refer to the previous part (in particular, prefixes, suffixes, articles, rhymes). Ellipsis in the language of fiction can serve to enhance speech, enhance the flow of movements, hyperbolize events, and perform other stylistic means. The essence of lexical compression is to express an idea in fewer words. Lexical compression is common in text, especially in dialogue. Lexical compression of a literary text means that the word has a generalizing meaning and can perform a variety of speech units, from a simple sentence to a set of sentences. Models of compression of words in modern English are a very effective aid in the mechanism of compression of the text. Thus, substitution, omission, substitution are the prevention of repetition and compression of the text. Telescopic words are often used in the role of coincidences, to individualize the speech of literary heroes. The main function of abbreviations is to find a nominative, vivid and memorable name, and abbreviations can also serve as markers that direct a person to a particular society.

Due to the rapid development of knowledge and technology, the modern era covers all aspects of today's society and at a time when the modern economy is changing, as well as translators-specialists with practical skills in translating scientific and technical texts in various fields. Therefore, the need for well-educated translators is growing day by day.

Due to the development of modern technologies, today scientists in different countries of the world have the opportunity to quickly exchange



information and conduct joint research, and thanks to these means of communication, modern science is achieving unprecedented results. In this context, the need for high-quality translation of scientific literature by many manufacturers is growing significantly. Translators, on the other hand, must constantly add translations of scientific literature to their vocabulary, improve their ability to understand terms, and know their meaning.

Therefore, when translating scientific and technical terms, the translator must first pay close attention to the meaning from the existing scientific and technical point of view, and then have the ability to compare with narrow scientific and technical terms.

The following requirements must be met in the process of translating scientific and technical texts: translation equivalent, translation accuracy, quality of translated data, logic of translation and quality of its coverage. For a scientific and technical text to have a quality translation, the translator must have the following knowledge and skills:

Must have knowledge of foreign language theory, phonetics, vocabulary and grammatical structure of the language;

-Practice the ability to translate scientific and technical texts;

-Practical linguistic knowledge (translation methods, transformation, the ability to change the equivalent of words, the ability to add words, the ability to describe in terms, etc.);

-Must have extralinguistic knowledge and ability to use the content of sentences and sentences in the process of translating the text (this requires sufficient knowledge in the translation of special scientific and technical text).

One of the most important problems in translation is not having a complete understanding that this translator is a scientific translator. For a scientific translation to be successful, the translator must have an idea of how it differs from other types of translation. In general, the translation of a scientific method includes many texts related to the research topic, from theses to abstracts and reviews of articles, dissertations, dissertations and monographs.

The following factors should be considered when translating the above types of work: the purpose of the translation, the method of translation, the organization of the text in the translation, and the organic relationship between its parts.

In addition to the external structure of academic texts (chapters, sections, paragraphs), there is also its internal structure. There are some peculiarities

in the translation of scientific texts - it is a way to identify material problems from general information and present their solutions. For example, in English, there are a number of words and phrases that are used for different purposes to connect parts of a text, as well as to move from the meaning of one phrase to another. For example:

-shuningdek (in addition, moreover, furthermore ...);

-shunga qaramasdan (although, however, despite, in spite of, nevertheless ...);

- boshqa so'z bilan aytganda (in other words);

-misol uchun (for example, for instance ...)

Problems with terms in translation

It is one of the leading forms of scientific thinking and is related to the concepts of understanding and comprehending meaning. While almost every term in a scientific text is a lexical unit, it represents one of the meanings of specific lexical units. These lexical units belong to the category of terms.

In general, a term is a word or phrase specific to a particular field of science and technology. The term has clear semantic boundaries in linguistics. It follows that terms are a system of concepts reinforced by verbal expressions specific to a particular science. If in a common language (other than a term) a word has many meanings, but it falls into the category of terms, the word has a definite meaning, and in translation its meaning in the term is used.

Therefore, one of the main mistakes a translator makes when translating a scientific text is that he or she does not have enough skills to use these scientific dictionaries or does not have a clear knowledge of the topic specific to the term - a situation that is even worse. can also be observed in the native language. In terms of usage and quantity, special dictionaries of terms are more widely used in scientific style texts than other types of dictionaries. These include: nomenclature names, professional dictionaries and terms, professional jargon, and more. This vocabulary is widely used in all areas of the scientific text (ie in the classification of the text, the structure of the text and its function, the components and factors of the text are taken into account). On average, a glossary of terms or terminology makes up 20% of the total vocabulary of scientific texts.

Grammar problems in translation.

Scientific communication has its own grammatical features.



For example, when translating some texts from English into Uzbek, in some cases there is a loss of lexical meaning and verbs have abstract meanings.

For example:

- It **seems** very interesting – Bu juda qiziq ko'rinadi.

- He probably **got** a cold – Balki u shamollab qolgan.

- Ali **feels** himself strange – Ali o'zini g'alati his qilayapti.

In these cases, we can see that the semantic load falls on the verbs instead of the noun phrases. In other words, verbs play an important grammatical role in these sentences.

Abstract verbs are also often used in English scientific texts:

Many houses were built in short term – Ko'pgina uylar qisqa mudatda qurilgan;

Some new planets were discovered in mid of 2000's – 2000-yillarda bir qancha yangi sayyoralar kashf qilingan (topilgan).

The examples given above show that abstract nouns are also widely used in English, and that the main load is focused on verbs, i.e., passive relative verbs.

Another interesting aspect of the study is that in today's linguistics, the percentage of use of present tense verbs in English is equal to past tense verbs, which of course depends on the context of the scientific text.

In general, a scientific text must have a clear statement of logic, and one of the main tasks of a translator is to translate this logic correctly and qualitatively. Scientific texts often have the same appearance, but these texts have expressive properties. In such texts, interrogative sentences are rarely used, and even if they are used, they are aimed at drawing the attention of the reader to the text. One of the features of scientific texts is that they do not use emotional properties.

General theory of translation.

The general theory of translation systematizes and forms the basis for conclusions drawn from the specific experience of translation. In the process of translation, the results of the translation and its ideas are summarized, while the translation activities take into account the conditions and factors inherent in translation.

The concept of the general theory of translation was developed by the Russian linguist and linguist A.V. Fedorov's [10] works are widely and fully

covered. According to this concept, any qualitative translation text should begin with a philological analysis of its linguistic basis and end with an artistic creation or scientific editing.

Special theory of translation.

Special theory of translation (or research on paired translation in linguistics) should take into account the equivalents, variants of correspondence between two languages, as well as the factors and criteria for their selection in a particular situation. The main way to study translation phenomena within this theory is to compare the two languages. For example: Uzbek and Russian, or Russian and English, or English and German.

Transformation theory of translation

Transformation theory (model) of translation is characterized by changes in the text of the translation during the translation activity. The reason is that in some cases the full meaning of the text cannot be translated or it is difficult to translate.

For example:

Not long-ago computers were considered an amazing invention. Today they form part of our everyday lives. The latest thing today is Virtual Reality. A Virtual Reality system can transport the user to exotic locations such as a beach in Hawaii or the inside of the human body.

The translation in Uzbek:

O'tgan davrda kompyuterlar ajoyib ixtiro deb hisoblanar edi. Bugungi kunda ular bizning kundalik hayotimizning bir qismini tashkil qiladi. Oxirgi ixtrolardan biri - bu Virtual haqiqat. Virtual haqiqat tizimi foydalanuvchlarni Gavayidagi plyaj yoki inson tanasining ichki qismi kabi ekzotik joylarga olib borish imkoniyatiga ega.

As we can see in the example, the translation from English into Uzbek was not fully translated, but underwent a transformation. In other words, the original text is explained in Uzbek in other words.

The transformational model of translation is related to the ideas of the American linguist N. Chomsky on transformational or generative grammar. Within this theory, the process of creating a translated text is considered as a syntactic transformation of the units and structures of the original language into the units and structures of the translated language, with great emphasis on the stages and methods of the translation process. This theory has also been developed by American translators K. Nayde. It is also



mentioned in the works of Cadz and W. Koller. In general, the ideas of transformational theory are one of the most important methods in translation studies that allow us to identify structures and units that are interrelated in translation and interrelated in the process of translating a pair of languages.

In short, A.Bibi and D.Ensinger [11] apply these concepts in a broad sense and apply to them the lexical, grammatical, discursive knowledge, skills and abilities that constitute linguistic competence, as well as general knowledge, knowledge of translation theory, knowledge of culture, extralinguistic competence consisting of knowledge of specific areas of translation, comprehension skills, deverbalization, peripheralization, application of transformations, information competencies, including the planning of the translation process in general, the ability to apply modern technologies acquisition and use of information, knowledge of the situation in the field of professional work, strategic competence, memory, self-correction, psychophysiological characteristics - psychomotor skills, cognitive ability, certain psychological characteristics implies.

REFERENCES

1. Fedorov A.V. (1983) *Foundations of the General Theory of Translation Linguistic Problems 4th ed.*, M., Higher school, 1983.10 p.
2. Solodub Yu.P. (2005). *Theory and practice of artistic translation. A textbook for students of the linguistic faculty of educational institutions.* Publishing center "Academy", 21; 160 p.
3. Bobrova K.A. (1986) *Compression as a means of re-nomination in German dialogical speech // Language units in the communicative and nominative aspects.* L., 29-37 p.
4. Arishtein V.M. (1985) *Semantic mechanism of understanding the sentences of word readings / Pragmatic and semantic aspects of syntax. Sat scientific works. Kalinin University - Kalinin*, 177 pp.
5. Veyze A.A. (1982). *Semantic compression of text in textbooks, Minsk*, 128 pp.
6. Pumyanskiy AL (1981) *Introduction to the practice of translating scientific and technical literature into English.* 2nd ed. add. M., 303 p.
7. Shimanovskaya L.A. (2012) *Modern theories of translation I ix use in work with an English-language scientific article of a biotechnological profile / Bulletin of Kazan Technological University.* 253–259 pp.
8. Konyaeva L. A. (2015) *On the difficulties of scientific and technical translation. Translation and comparative linguistics. Issue number 11*, 50-54 pp.
9. Khomenko S. A. (2013) *Fundamentals of the theory and practice of translating a scientific and technical text from English into Russian.* Minsk: BNTU, .- 203 p
10. Fedorov A.V. (1953) *V. Introduction to the theory of translation. - M. : Publishing house of literature on foreign. Language*, 335 pp.
11. Bibi A., Ensinger D. (2000) *PACTE The acquisition of translation competence: hypotheses and methodological problems of a research project. - pp. 99-100.*



THE PHENOMENON OF PHYSICAL MATURITY AND ITS DEVELOPMENT

Iskandarov Nurbek Sharifboevich

*Teacher, Department of Theory and Methodology of Physical Culture
, Faculty of Physical Culture, Urgench State University, Khorezm, Uzbekistan*

ABSTRACT

This paper deals with the scientific basis for the study of the physical development and physiological maturity of individuals. This problem is of extreme importance in view of the serious responsibility which must be assumed by those who will direct the physical development of the youth. Some of the problems dealt with here are basic concepts in physical development, aspects of physical development-growth, differentiation and maturation, patterns of development.

KEY WORDS: *maturity, biological maturity, physical maturity, motor development*

The content of physical education is expressed in physical maturity, diagnosis of physical condition and culture of physical education. In some literatures, physical maturity refers to the formation of a sequence of exercises and training that generates data on the growth of physical culture in a person, i.e., physical and mental changes in a person ranging from simple to complex. Physical maturity is a harmonious form of physical appearance, physical qualities - a way to achieve a high level of maturity, agility, flexibility, strength. Physical culture is an integral part of physical education and its content includes:

1. The structure of human organs and their functional maturity.
2. Strengthening the health of individuals.
3. Getting used to the rules of hygiene.
4. Improving the comprehensive skills of the individuals.
5. Formation of physical and physiological qualities of future employees.
6. Creating conditions for physical and age characteristics in individuals.
7. To develop the will, endurance, perseverance, discipline, friendship in the individuals.
8. Nurturing personal physical abilities.

Growth occurs through a complex, organized process characterized by predictable developmental stages and events. Although all individuals follow the same general course, growth and maturation rates vary widely among individuals.

Just as it is unrealistic to expect all children at the same age to achieve the same academic level, it is unrealistic to expect children at the same age to have the same physical development, motor skills, and physical capacity. Regular physical activity does not alter the process of growth and development. Rather, developmental stage is a significant determinant of motor skills, physical capacity, and the adaptation to activity that is reasonable to expect.

Biological Maturation

Maturation is the process of attaining the fully adult state. In growth studies, maturity is typically assessed as skeletal, somatic, or sexual. The same hormones regulate skeletal, somatic, and sexual maturation during adolescence, so it is reasonable to expect the effect of physical activity on these indicators of maturity to be similar.

Skeletal maturity is typically assessed from radiographs of the bones in the hand and wrist; it is not influenced by habitual physical activity. Similarly, age at peak height velocity (the most rapid change in height), an indicator of somatic maturity, is not affected by physical activity, nor is the magnitude of peak height velocity, which is well within the usual range in both active and inactive youth [1].

Adolescence is the transitional period between childhood and adulthood. The adolescent growth spurt, roughly 3 years of rapid growth, occurs early in this period. An accelerated increase in stature is a hallmark, with about 20 percent of adult stature being attained during this period. Along with the



rapid increase in height, other changes in body proportions occur that have important implications for sports and other types of activities offered in physical education and physical activity programs. As boys and girls advance through puberty, for example, biacromial breadth (shoulder width) increases more in boys than in girls, while increases in bicristal breadth (hip width) are quite similar. Consequently, hip-shoulder width ratio, which is similar in boys and girls during childhood, decreases in adolescent boys while remaining relatively constant in girls. Ratios among leg length, trunk length, and stature also change during this period. In contrast, adolescent and adult females have shorter legs for the same height than males of equal stature. Body proportions, particularly skeletal dimensions, are unlikely to be influenced by physical activity; rather, body proportions influence performance success, fitness evaluation, and the types of activities in which a person may wish to engage. For example, there is evidence that leg length influences upright balance and speed. Individuals who have shorter legs and broader pelvises are better at balancing tasks than those with longer legs and narrower pelvises, and longer legs are associated with faster running times. Also, longer arms and wider shoulders are advantageous in throwing tasks, as well as in other activities in which the arms are used as levers. Approximately 25 percent of engagement in movement-related activities can be attributed to body size and structure.

Motor Development

Motor development depends on the interaction of experience (e.g., practice, instruction, appropriate equipment) with an individual's physical, cognitive, and psychosocial status and proceeds in a predictable fashion across developmental periods. An eloquent metaphor—"the mountain of motor development" is used to aid in understanding the global changes seen in movement across the life span[2]. Early movements, critical for an infant's survival, are reflexive and dominated by biology, although environment contributes and helps shape reflexes. This initial reflexive period is followed quickly by the preadapted period, which begins when an infant's movement behaviors are no longer reflexive and ends when the infant begins to apply basic movement skills (e.g., crawling, rolling, standing, and walking) that generally are accomplished before 12 months of age. The period of fundamental motor patterns occurs approximately between the ages of 1 and 7 years, when children begin to acquire basic fundamental movement skills (e.g., running, hopping, skipping, jumping, leaping, sliding, galloping, throwing, catching, kicking, dribbling, and striking). Practice and instruction are

key to learning these skills, and a great deal of time in elementary school physical education is devoted to exploration of movement. Around age 7, during the so-called context-specific period of motor development, children begin to refine basic motor skills and combine them into more specific movement patterns, ultimately reaching what has been called skillfulness. Compensation, the final period of motor development, occurs at varying points across the life span when, as a result of aging, disease, injury, or other changes, it becomes necessary to modify movement.

Physical Development

Physical development is a dynamic process of growth (increase in body length and weight, development of organs and body systems, and so on) and biological maturation of a child in a certain period of childhood. The process of development of a set of morphological and functional properties of an organism (growth rate, body weight gain, a certain sequence of increase in various parts of the body and their proportions, as well as the maturation of various organs and systems at a certain stage of development), mainly programmed by hereditary mechanisms and implemented by a certain plan under optimal living conditions.

Physical development reflects the processes of growth and development of the organism at individual stages of postnatal ontogenesis (individual development), when the transformation of genotypic potential into phenotypic manifestations occurs most clearly. Features of physical development and physique of a person largely depend on his constitution.

Physical development, along with fertility, morbidity and mortality, is one of the indicators of the level of health of the population. The processes of physical and sexual development are interrelated and reflect the general patterns of growth and development, but at the same time they significantly depend on social, economic, sanitary and hygienic and other conditions, the influence of which is largely determined by the age of a person.

Physical development is understood as continuously occurring biological processes. At each age stage, they are characterized by a certain complex of morphological, functional, biochemical, mental and other properties of the organism connected with each other and with the external environment and the reserve of physical strength caused by this originality. A good level of physical development is combined with high indicators of physical fitness, muscle and mental performance.

Unfavorable factors that have an impact in the prenatal period and in early childhood can disrupt the sequence of the body's development, sometimes



causing irreversible changes. Thus, environmental factors (nutritional conditions, upbringing, social conditions, the presence of diseases, and others) during the period of intensive growth and development of a child can have a greater impact on growth than genetic or other biological factors.

The assessment of physical development is based on the parameters of growth, body weight, the proportions of development of individual parts of the body, as well as the degree of development of the functional abilities of his body (vital capacity of the lungs, muscle strength of the hands, etc.; development of muscles and muscle tone, posture, musculoskeletal apparatus, the development of the subcutaneous fat layer, tissue turgor), which depend on the differentiation and maturity of the cellular elements of organs and tissues, the functional abilities of the nervous system and the endocrine apparatus[3]. Historically, physical development is judged mainly by external morphological characteristics. However, the value of such data increases immeasurably in combination with data on the functional parameters of the organism. That is why for an objective assessment of physical development, morphological parameters should be considered together with indicators of functional state[4].

1. Aerobic endurance - the ability to perform long-term work of average power and resist fatigue. The aerobic system uses oxygen to convert carbohydrates into energy sources. Longer exercise also involves fat and, in part, protein, making aerobic exercise almost ideal for fat loss[5].

2. Speed endurance - the ability to withstand fatigue in submaximal speed loads.

3. Strength endurance - the ability to withstand fatigue with sufficiently long-term strength loads. Strength endurance shows how much the muscles can create repetitive efforts and for how long to maintain such activity.

4. Speed-strength endurance - the ability to perform sufficiently long-term strength exercises with maximum speed.

5. Flexibility - the ability of a person to perform movements with a large amplitude due to the elasticity of muscles, tendons and ligaments. Good flexibility reduces the risk of injury during exercise.

6. Quickness - the ability to alternate muscle contraction and relaxation as quickly as possible.

7. Dynamic muscular strength - the ability to maximally rapid (explosive) manifestation of efforts with great burden or own body weight. In this case, a short-term release of energy occurs, which does not require oxygen, as such. An increase in muscle strength is often accompanied by an increase in muscle volume and density — muscle “building”. In addition to the aesthetic value, the enlarged muscles

are less susceptible to damage and contribute to weight control, since muscle tissue requires more calories than adipose tissue, even during rest[6].

8. Agility - the ability to perform complex coordination motor actions.

9. Body composition - the ratio of fat, bone and muscle tissue of the body. This ratio, in part, reflects health and fitness status as a function of weight and age. Excessive adipose tissue increases the risk of heart disease, diabetes, high blood pressure, and more.

10. Height-weight characteristics and proportions of the body - these parameters characterize the size, body weight, distribution of body mass centers, physique. These parameters determine the effectiveness of certain motor actions and the "suitability" of using the athlete's body for certain sports achievements.

11. An important indicator of a person's physical development is posture - a complex morpho-functional characteristic of the musculoskeletal system, as well as his health, an objective indicator of which is positive tendencies in the above indicators[7].

As the concepts of "physical development" and "physical fitness" are often confused, it should be noted that physical fitness is the result of physical training, achieved when performing motor actions necessary for mastering or performing a professional or sports activity by a person. Optimal physical fitness is called physical fitness. Physical fitness is characterized by the level of functional capabilities of various body systems (cardiovascular, respiratory, muscular) and the development of basic physical qualities (strength, endurance, speed, agility, flexibility). The assessment of the level of physical fitness is carried out according to the results shown in special control exercises (tests) for strength, endurance, etc. and its goals. Human performance is the ability of a person to perform a given function with varying efficiency.

REFERENCES

1. Kail, Robert V (2011). *Children and Their Development (6th Edition) Mydevelopmentlab Series*. Englewood Cliffs, N.J: Prentice Hall. ISBN 978-0-205-03494-9. OCLC 727047867.
2. Vilaça, S. (2012). *Desenvolvimento infantil e capacitação materna as a result of the application of the Parental Empowerment Program for desenvolvimento infantil (PEPDI)*. Doctoral thesis. University of Minho.
3. Barnett, W. Steven (Winter 1995). "Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes." *The Future of Children*. 5 (3): 25–50. doi: 10.2307 / 1602366. JSTOR 1602366.



4. Bronfenbrenner, Urie (1979). *The ecology of human development: experiments by nature and design*. Cambridge: Harvard University Press. ISBN 978-0-674-22456-8. OCLC 4515541.
5. Blades, Mark; Smith, Peter K .; Cowie, Helen (2011). *Understanding Children's Development*. Wiley-Blackwell. ISBN 978-1-4051-7601-9. OCLC 620124946.
6. Shaffer, David R. (2009). *Social and personality development (6th ed.)*. Australia: Wadsworth. ISBN 978-0-495-60038-1.
7. Cole, Michael; Vygotskiĭ, L. S. (1978) [Published originally in Russian in 1930]. *Mind in society: the development of higher psychological processes*. Cambridge: Harvard University Press. ISBN 978-0-674-57628-5. OCLC 3517053.



STUDY OF SELF COMPACTING CONCRETE

Niraj Kumar¹, Devendra Kumar Sharma², Ritesh Kumar³

*¹Assistant Professor, Department of Civil Engineering,
Aryabhata College of Engineering & Research Center, Ajmer*

*²Assistant Professor, Department of Civil Engineering,
Aryabhata College of Engineering & Research Center, Ajmer*

*³Assistant Professor, Department of Civil Engineering,
Aryabhata College of Engineering & Research Center, Ajmer*

INTRODUCTION

Self compacting concrete is a type of concrete that does not require any mechanical vibration or any kind External source for vibration for its condensation. It can be placed under its own weight and it can be handled without bleeding or isolation. Although the circumstances in which it is built must be free from any noise or any kind Vibration that can damage or alter the

property of such concrete. Such concrete is used especially in places where it is difficult to compact. So it is gaining traction. It is more commonly used in critical works to ensure its discovery and structural performance and safety. It is widely used in various important project sites, drilled shafts, retaining Systems, pipes, sewers, columns, floor finishing and many more.



Fig 1: Flooring Finish done by self compacting concrete

KEY WORDS: Concrete, Vibration, Self Compact.



ADVANTAGES

There are some advantages of having such concrete for construction purpose.

1. Such concrete reduces the construction time as it does not require any vibration to compact it.
2. It has established property on the basis of its own weight and there are not so much laborers needed.
3. It modifies and enhances the filling capacity of highly sophisticated structural elements.
4. It reduces noise pollution. Decibel-crossing noise will cause vibration in the concrete and it will interfere with its matrix. Therefore, noise is not encouraged to pass and cool Environment is maintained in construction.
5. It provides good structural performance and is more capable of durable production structural member.
6. It reduces the wear of those devices which are caused by vibration because there is no vibration need here.
7. This allows easy pumping of concrete.
8. It opens space for innovative ideas to bring aesthetics to structural elements.
9. This enables it to produce finer finishes on surfaces.
10. It is bonded for better reinforcement than ordinary concrete.
11. Workers safety is ensured as no heavy equipment is used which will induce vibration.

PROPERTIES

A concrete mixture has to undergo three capacities to become self-compacting concrete. These -

- filling capacity
- Passing ability and
- Resistance to isolation.

The ability to fill is the ability to self compact the concrete to cover all locations, without vibration and without its own weight, which is poured into the formwork. Entangling air on or inside the concrete surface. While the ability to pass. Under this the ability of self-compact concrete to flow freely through congested openings like its weight in terms of spaces between reinforcements. This property indicates the symmetry of concrete is to distribute it near the barriers where it is poured. Finally, resistance to ablation is the resistance offered against concrete. The separation and mixing remain the same until transported.

TESTS AS PER EFNARC

SPECIFICATIONS

Some tests are recommended to test for passing capacity, filling capacity, and resistance. For isolation. These are -

- Slump Flow Test
- J-Ring Test
- V-Funnel Test
- U box test

Slump Flow Test - This test is used to find the filling capacity of self compacting concrete. This test also determines the durability and capacity of the concrete Flow freely without hindrance. T50 is a secondary flow signal and gives Better signs of fluidity. Here, the minimum deceleration value should be 650 mm and the maximum deceleration value should be 800 mm.

J-ring test - This test is used to find out the passing ability of self compacting concrete. It consists of rectangular section equipment of 30 mm x 25 mm size.

V-Funnel Test - This test is used to find the filling capacity of self compacting concrete. The maximum size used here is 20 mm. The test involves a funnel and fills approximately 12 liters of concrete. The time it takes for a device to flow through it is measured. The funnel is then refilled with concrete and left for 5 minutes. To settle under your weight. Isolation will also increase as flow is related to isolation as time increases. The ability to fill the minimum and maximum time is 6 seconds and 12 seconds, respectively.

U box test - This test is used to detect the filling capacity of self compacting concrete. The height of the concrete to be filled in the compartment is measured in two places and they mean calculation. The entire test has to be done in 5 minutes. One of the following the limitation of this test is that the difference in height should be between 0–30 mm.

CONCLUSION

Although advances in research are being made in more well-modified production Self-concrete concrete, the construction industry is somehow still stuck with the general Solid. The absence of an industrial standard for self-compacting concrete allows for more Room for creativity in creating a custom mix for a specific job requirement. This advancement in technology has paved the way for more advanced self compacting. Concrete to replace ordinary concrete. Also, fly ash or other high grade water reducing



penetration may contribute to the production of a well-advanced concrete It will be cheaper as well as more reliable. Cost is the main deciding factor in the construction industry and therefore compact concrete itself must be inexpensive to manufacture widely used worldwide.

REFERENCES

1. *The Concrete Centre, "Self Compacting Concrete (SCC)"* – [https://www.concretecentre.com/Specification/Speci al-Concrete/self-compactingconcrete-\(SCC\).aspx](https://www.concretecentre.com/Specification/Speci al-Concrete/self-compactingconcrete-(SCC).aspx)
2. *The Balance Small Business, "Self-Compacting Concrete Applications and Advantages"*– <https://www.thebalancesmb.com/self-compacting-concrete-844767>
3. *Hajim Okamura and Masahiro Ouchi, "Self Compacting Concrete" Journal of Advanced concrete Technology Vol. 1, pp 5-15 April 2003.*
4. *H.J.H Brouwers and H.J Radix "Theoretical and experimental study of Self Compacting Concrete", Cement and Concrete Research, 9 June 2005, PP 2116-2136*
5. *P. Rathish Kumar and M.L.V. Prasad, Fresh and Hardened Properties of Glass and Polypropylene Fiber Reinforced Self Compacting Concrete, 2nd national conference on current trends in technology NUCONE-2007, Ahamdabad Nov 29th – December 1st. PP 179-183*
6. *Specifications and Guidelines for Self Compacting Concrete, February 2002, EFNARC, Association House, 99 West Street, Farnham, UK*
7. *S. Mahesh, Self Compacting Concrete and Its Properties, International Journal of*
8. *Engineering Research and Applications, Vol. 4, Issue 8 (Version 7), August 2014, pp.72-80.*



DIGITAL FISHING APPLICATION FOR FISH FARMERS

Mrs. Paridhi Singhai¹, Prof. Hirendra Hajare²

¹M. Tech Student, Department of CSE, Ballarpur Institute of Technology (BIT) Ballarpur, Maharashtra, India.

²Assistant Professor, Department of CSE, Ballarpur Institute of Technology (BIT), Ballarpur, Maharashtra, India.

ABSTRACT

Smart phone technology creates new opportunities for fish farmers to increase their productivity and selling with ease. Fish Farmers working on farms are now able with a low cost smart phone and the specialized software application to obtain facilities that couldn't have on their hands before. The use of this software application in a smart phone can overleap the high difficulties of fishers, fish farmers and input suppliers requirements which were stand as obstacle for many years so far. In this paper we present the e- Machhli which is an Android smart phone application and how it creates the management between the fishers, fish farmers and input suppliers and all of them to be performed by the touch of smart phone screen button. The use of software is basically for fishers and will be freely available on a Playstore .

This e-Machhli App is an initiative under Pradhan Mantri Matsya Sampada Yojana (PMMSY). The app aims to serve as a comprehensive fisheries development marketplace and information portal for direct use of fishers, fish farmers as well as input suppliers. The platform will be the central digital platform for farmers managing fisheries including buying and selling of high yield seeds, feeds as well as equipment and implements and laboratory testing facilities[11].

KEYWORDS: Android application, Fish Farmers , Fishers, Fish Suppliers, Mobile Application

INTRODUCTION

In today's scenario, at the central level there's no such existing digital platform which provides all fishers, fish farmers and input suppliers to communicate on a single platform .Hence there's a need for such system application which provides communication platform for them.

In this application called "e- Machhli" provided a facility of connecting fishers, fish farmers and input suppliers through a digital platform where they can easily exchange information about varieties, stocks and each and every information related to fishes . Hence this makes very easy for them to communicate with each other. In this application basically there are four modules, every individual registering themselves

according to their designation. Once they have created their account and made their profile they can use the privileges of the application for lifetime.

The Pradhan Mantri Matsya Sampada Yojana (PMMSY) maybe a flagship scheme for focused and sustainable development of fisheries sector within the country with an estimated investment of Rs. 20,050 crores for its implementation during a period of 5 years from FY 2020-21 to FY 2024-25 in altogether States/Union Territories, as a neighborhood of Aatma Nirbhar Bharat Package. Out of this, an investment of about Rs 12,340 crores is proposed for beneficiary-oriented activities in Marine, Inland fisheries and Aquaculture and about Rs 7,710 crores investment for Fisheries Infrastructure [8].



PMMSY is supposed to affect critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of useful chain, traceability, establishing a strong fisheries management framework and fishers' welfare.

EXISTING SYSTEM

In India no such existing application systems provide the trading and selling of fishes online or digitally all over the country. Hence arises the urgent need of such an application which is not only useful for fishers, fish farmers, input suppliers but each and every individual should have access and right to go for fish trading ,buying or selling it.

Fish Market place is a place where we found varieties of fishes and fish products. If it is a wholesale fish market then the exchange takes place between fisher suppliers and fish farmers whereas in retail market or we often called as street market customers use to buy goods and products from fish shopkeepers.

PROPOSED SYSTEM

In this application all the Fishers (Capture), Fishermen and Fish Vendors and Input Suppliers, labs across the country register themselves on a single platform. Initially developed it as a self-managed mobile application. Users can register with a valid Mobile Number and OTP and view other stakeholders in their area as per GIS coordinates. The app should progressively have additional features of information dissemination on PMMSY, Other Government

programs, Weather forecast for Fishermen, Knowledge base, Extension services etc.

There may be not many Fishermen and related stakeholders may register themselves and use the App, given the requirement of smart phones with connectivity and digital literacy levels but to ensure high level of registrations of fishermen and other stakeholders and their engagement it will be necessary to involve CSC VLEs who will REGISTER them exhaustively and assist in submitting applications under various Govt. Schemes.

The App will have a component of assisted mode Registrations of Fisherman /stakeholders by CSCs. Post this, as per priorities of DOF additional services of IEC, Training, Govt. Services, PMMSY Services etc. at CSC can be considered and progressively developed, extending the engagement of the team.

METHODOLOGY

Workflow of proposed system [Figure 1]

- I Step 1: Start
- II Step 2: Registration
- III Step 3: Login
- IV Step 4: Validation
- V Step 5: Profile Creation
- VI Step 6: Gathering Information
- VII Step 7: Exploring functions
- VIII Step 8: Logout

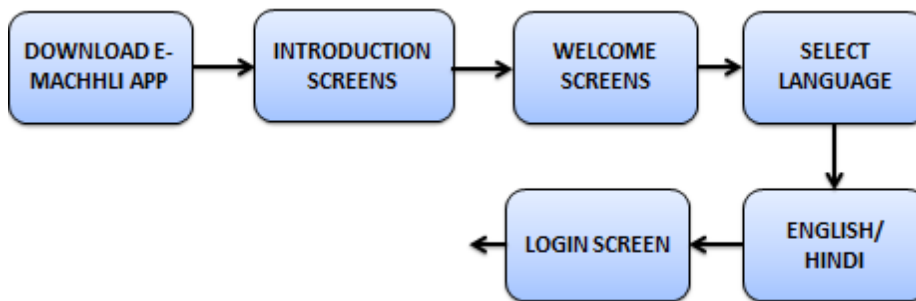


Figure 1: Architecture of system application

MODULES DESCRIPTION

In this android application we have mainly four modules. Description of each module is explained in detail below-

1. FISHER

This module provides the fisher details. If the fisher is new to the application means they need to

register for this application first after then they can access this application easily by using their login credentials.. The fisher can register the details with proper validation. and all the fields will be required for this registration process. The fisher can add the fishing details, which includes type or variety of fish ,water along with the exact location, and contact number.



Then the fisher profile has been generated which can be updated later on as per requirements.

2. FISH FARMER

This module provides the fish farmer details. If the fisher is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials.. The farmer can register the details with proper validation. and all the fields will be required for this registration process. The farmer can add the fishing details, which includes type or variety of fish ,pond details along with the exact location, and contact number. Then the fish farmer profile has been generated which can be updated later on as per requirements. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

3. FISH VENDOR

This module provides the fish vendor details. If the vendor is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials. The vendor can register the details with proper validation. and all the fields will be required for this registration process. The vendor have to add the

details, which includes type or variety of fish , shop details, contract with government along with the exact location, and contact number. Then the fish vendor profile has been generated which can be updated later on as per requirements. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

4. FISH SUPPLIER

This module provides the fish supplier details. If the supplier is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials. The supplier can register the details with proper validation. and all the fields will be required for this registration process. The supplier can add all the fishing details, which includes type or variety of fishes available , pond details, contract with government along with the exact location, and contact number. Then the fish supplier profile has been generated which can be updated later on as per requirements. All the information related to stock of fishes can be generated from here. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

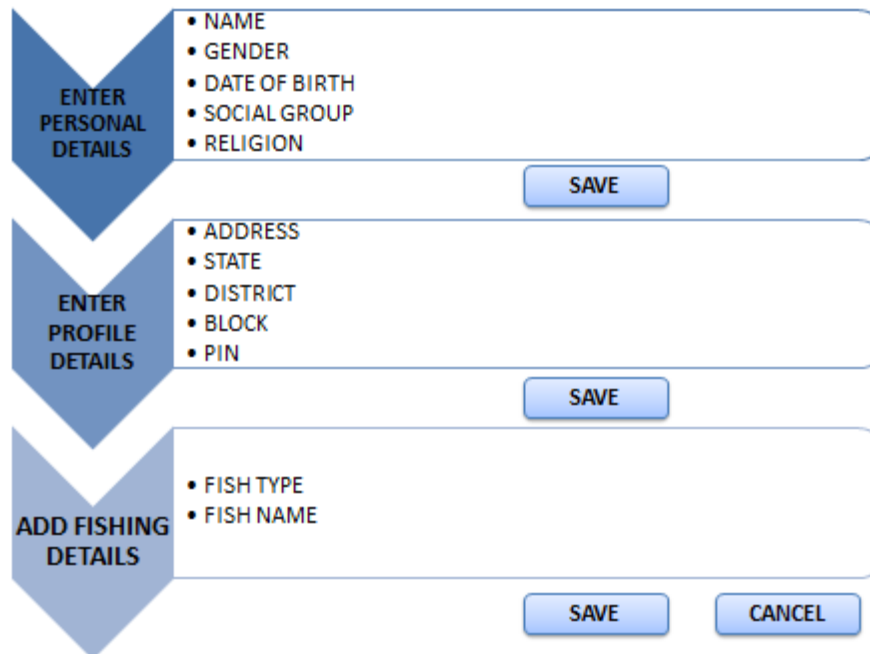


Figure 2: Profile Creation



FUTURE SCOPE

In the updated version of this application multiple functionalities can be increased like linking with Aadhar card, various online payment gateway methods can be included, reduction in various complexities. Maintenance and Updation of an application should be done regularly. Website can be modified enhancing many features. Maintenance should be provided to the application and websites with increasing functionalities. More enhanced and Strong User interface which supports numerous of users and their database with versatility.

CONCLUSION

E-MACHHLI is the application which belongs to the Department Of Fisheries that is which is designed as an android application for every individual who is related to the department of fisheries whether its fishers, fish farmers and input suppliers to communicate on a single platform . Till now there was no such existing platform for their communication therefore arises the need of an such application. This application is one of the innovation in the fisheries department for the fish farmers. It will definitely help them for the trading and business of fishes with ease. Department of fisheries is going to make this available for farmers and every individual as early as possible , currently it's under the testing phase .

ACKNOWLEDGEMENT

We would like to thank the almighty God, beloved Parents and Friends for being a guide and a well-wisher to us throughout the project, along with their constant and in valuable support.

We are fortunate to express our heartfelt thanks to our honourable Founder and Chairman, Dr.Sanjay Wasade, Ballarpur Institute of Technology, for his guiding us and permitting us to do our project by our own.

We express our sincere gratitude and wish to thank our beloved Principal, Dr. Rajnikant Mishra, M.Tech., Ph.D., for his support and guidance.

We extend our gratitude and heartfelt thanks to Head of the Department, Project Supervisor, Prof Hirendra Hajare, M.Tech., for guiding us in all aspects of our project in each stage and providing us with valuable suggestions.

Finally, we take this opportunity to thank all the Faculty members of Department of Computer Science and Engineering for their unwavering support and cooperation which made us keep our zeal and spirits high to complete this project work successfully.

REFERENCES

1. https://en.wikipedia.org/wiki/Fish_market .
2. A.Ramya, R.Rohini & S.Ravi, IOT Based Smart Monitoring System for Fish Farming, *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 – 8958, Volume-8 Issue-6S, August 2019.
3. Francesco Rossi*, Alfredo Benso*, Stefano Di Carlo, Gianfranco Politano*, Alessandro Savino* and Pier Luigi Acutis, FishAPP: a Mobile App to Detect Fish Falsification through Image Processing and Machine Learning Techniques, 978-1-4673-8692-0/16/\$31.00 _c 2016 IEEE.
4. Suxia Cui ,1 Yu Zhou,1 Yonghui Wang,2 and Lujun Zhai1, Research Article Fish Detection Using Deep Learning, *Hindawi,Applied Computational Intelligence and So. Computing, Volume 2020, Article ID 3738108, 13 pages,https://doi.org/10.1155/2020/3738108.*
5. Ujwala T S1, Sunita G Devareddy2, Yamuna S3, Vandana S4, A Review on Fish Farm Aquaculture Monitoring & Controlling System, *International Research Journal Of Engineering And Technology (Irjet) E-Issn: 2395-0056 Volume: 07 Issue: 02 | Feb 2020 Www.Irjet.Net P-Issn: 2395-0072.*
6. Arpita Sharma and Kiranmayi Dhenuvakonda, Virtual fisheries through mobile apps: The way forward, *E-ISSN: 2320-7078 P-ISSN: 2349-6800 ,JEZS 2019; 7(6): 1093-1099 © 2019 JEZS.*
7. FAO. Information and communications technologies benefit fishing communities. *New Directions in Fisheries – A Series of Policy Briefs on Development Issues,http://www.sflp.org/briefs/eng/policybriefs.html. 2007.*
8. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1652573>
9. <https://economictimes.indiatimes.com/news/economy/agriculture/pm-modi-to-launch-flagship-fisheries-scheme-app-for-farmers-on-thursday/articleshow/78016160.cms?from=mdr>
10. <https://apk.center/in.gov.fisheries.html>
11. https://apkdownload.com/download_eMachhli/in.gov.fisheries.html
12. <https://agriculturepost.com/things-you-need-to-know-about-pradhan-mantri-matsya-sampadajoyana/#:~:text=PMMSY%20scheme%20primarily%20focuses%20on,seaweed%20and%20ornamental%20fish%20cultivation.>
13. Mrs. Paridhi Singhai*1, Prof. Hirendra Hajare*2, *E-MACHHLI ANDROID BASED APPLICATION FOR FARMERS, e-ISSN: 2582-5208 ,@International Research Journal of Modernization in Engineering, Technology and Science [1135] www.irjmets.com*



A STUDY ON CUSTOMER SATISFACTION TOWARDS ELECTRONIC PRODUCT SPECIAL REFERENCE WITH LG IN TIRUPUR CITY

Sridhar. S¹, Mr. M. R, Chandrasekar²

¹Student, Department of Commerce, Dr. N.G.P Arts and Science College, Coimbatore- 48

²Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College, Coimbatore- 48

ABSTRACT

LG Electronics is a Korean based global brand in the field of consumer electronics, home appliances and mobile communications. The critical analysis in identifying the steps taken by the LG Electronics in the light of the existing literature review helps us to correlate these steps with the enhanced brand image, brand value and brand positioning. Information is collected from various reports i.e., LG Annual reports; International Magazines from the world of Business and Technology; research literatures and other reputable sources. Innovation & design and constant obsolescence of ICT and IT Products (i.e., mobiles in particular), LG have to stick on R&D, design strategies and innovation and creativity for competing in the global market.

KEYWORDS: *LG Electronics, brand image, brand value, brand positioning*

INTRODUCTION

Electronics goods are becoming a basic need rather than a luxury. There is a rapid growth witnessed by the companies producing electronic goods since last decade. The manufactures have brought out numerous models of superior technology. A number of electronic goods are available in the market today with different features. Therefore, consumers have a wide choice of electronic goods. Before the liberalization of the Indian economy, only a few companies durable market. After the Liberalization foreign player like Samsung, LG, Sony, whirlpool and AIWA came onto the picture. Today these players have the major share of the consumer durable market.

People are now living in the age of electronics. Using electronics today is so much a part of their daily lives, they can hardly think of the way the world would be without electronics. Everything from cooking to music uses electronics or electronic components in some way or other. A car has a many electronic components, as does the cooking stove laptop and cell phone. it is hard to find an electrical item in people home that does not have electronics parts with it in

some way. Million of people in the world every day depend on the television set for news and entertainment.

Consumer preference is a general term applied to all faces of marketing products and services. This is not to be confused with the more specific term brand preference, which relates to consumer preferring one brand over competing brands. If one brand is unavailable, consumer will likely choose another brand to fill the gap.

IMPORTANCE OF THE STUDY

LG electronics India has emerged as the most trusted brand of 2015 in a study of consumer influence released by the trust research advisory. LG was ranked NO. 1 brand in India in the study that spanned across 16 Indian cities amongst 19,000 Unique brand across industries and categories out of which 1000 top brands were listed in the report.

Trust is the most important aspect in the success of any consumer brand in India or anywhere in the world. They are humbled and delighted with the trust that consumer have placed in brand



LG and ranked them no.1 among thousand of brand in India. In their journey of 17 years in India, LG has constantly worked towards a creating a good life for its consumers by providing the best of products that are high on innovation technology usability and style.

Perhaps the most salient factor for successful brands is the promise of consistent quality. Whether its a business on a consumer making a purchase decision, key want to be sure in this world of endless choice that their decision is the right one.

STATEMENT OF PROBLEM

Electronics is considered as the essential part of modern life. In the present century, new technologies introduce new brand of electronic items every day, the new arrival of electronic items has made the companies constantly engaged in gaining the attention of the consumers like price, offers, etc. The customer satisfaction towards selective LG products has been made by the researcher in Tirupur for studying the necessity of customer preference and their satisfaction.

In this context this study has been undertaken by the researcher to examine Behavioural profile of consumers of the TV instruments taking the socio- economic characteristics and the marketing policies and practices of the manufacture.

The present study titled “ A study on customer perception and satisfaction towards electronic products special reference with LG in Tirupur city is considered relevant as the study has its own significance in the recent technological era

OBJECTIVE

- To study the consumer preference and satisfaction towards LG products.
- To study factors influencing attached by the consumer of LG products.
- To analyze the price factors of different LG products based on consumer preference.
- To develop on intelligent appreciation of modern marketing practices.
- To provide guiding policies regarding marketing procedure and their implementation.

METHODOLOGY

AREA OF THE STUDY

- Area of the study refers to Tirupur

SAMPLE SIZE

- The data was collected from 150 Respondence using convenience sampling method.

SOURCES OF DATA

- The study has used primary data which is collected with a structured questionnaire from 150 Respondence.

TOOLS FOR ANALYSIS

For the purpose of the analysis, the following tolls are used

- Simple Percentage analysis
- Weighted average analysis
- Chi- Square analysis

LIMITATION OF THE STUDY

- The study covers only in Tirupur. It cannot generalize the entire population.
- The study is restricted to 150 respondents, results are restricted with in the domain.
- This study period is only one year.
- Data collection is done through questionnaire filled by the respondents which may not be accurate.

REVIEW OF LITERATURE

Preeti Mehra (2011) in her article noted the UN report information's (The progress of the World Women – 2011 – 2012). She said that the maximum 60 per cent of the women in India have no say in simple decision making in the rural family, but working women have distinct advantage over non working or unpaid working women decision making for purchasing of consumer durable goods.

Ministry of Commerce (2011) released the data that the sales of home appliances in rural China rose 128 percent during the first four months, boosted by a nationwide subsidy program for Chinese rural consumers, The sales value of home appliances covered by the rural subsidy program reached 94.43 billion yuan (14.3 billion U.S. dollars) from January to April, according to a statement on the MOC. During this period, the sales of home appliances in the countryside reached 39.515 million units, an increase of 91 percent from one year ago.

Lu Yongxi (2010)¹ has pointed out in his report that, Indian markets are ready to accept white goods even the price are changing at the global level. But, it is very difficult to compare with the international



market. He also said that Indian rural consumers are also eager to buy goods for their self satisfaction.

LG COMPANY PROFILE

LG electronics include is a south Korean multinational electronics company headquarters in Yeouido- dong, seoul, south Korea , and is part of the LG group, employing 82,000 people working in 119 local subsidiaries worldwide. It was established in 1958 as gold star, the company started producing radios, TV, refrigerator, air condition and washing machines, with its innovative and expertise it led the way into creating advance. In 2005 the company ranked top 100 global brand, in 2006 LG growth of 14% till now has become the largest plasma panel manufacture. LG companies four business units: Home entertainment, mobile communication, Home appliance & air solution, and vehicle components with station. India as its main production vendor for refrigerator and washing machines in the Indian

subcontinent. In 2011, LG electronics was the world"s second-largest television manufacturer. The CEO of LG electronics is JO Chongjin. This study will investigate the different marketing used by LG electronics, its performance in the market, market share, sales and profitability techniques.

BRAND IDENTITY

LG is the brand that is delightfully smart. "Life"sGood" slogan and futuristic logo are a great representation of what we stand for. Global, Tomorrow, energy, Humanity and technology are the pillars on which the corporation is founded on, with the capital letters L and G positioned inside a circle to Centre their ideals above all humanity. The symbol mark stand for their resolve to establish a lasting relationship with and to achieve the highest satisfaction for their customers.

**TABLE NO 1
GENDER OF THE RESPONDENTS**

Sino	Gender	Number of Respondents	Percentage (%)
1	Male	81	54
2	Female	69	46
3	Transgender	0	0
	Total	150	100

INTERPRETATION

The above table shows that 54% of the respondents were male and 46% of the respondents were female.

Here majority 54% of the respondents were male.

**CHART NO 1
GENDER OF THE RESPONDENTS**

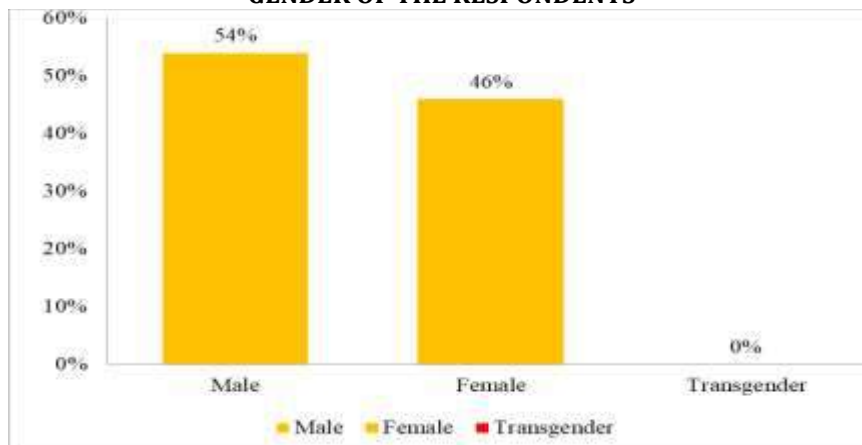




TABLE NO 2
ANALYSIS BETWEEN ATTRACTING FACTOR OF LG PRODUCTS AND NUMBER OF OWNED LG PRODUCTS

NULL HYPOTHESIS (H₀):

There is no significant relationship between attracting factor of LG products and number of owned LG products.

ALTERNATIVE HYPOTHESIS (H₁):

There is a significant relationship attracting factor of LG products and number of owned LG products.

Owned Number	Owned Number				Total
	1	2	3	4 and More	
Quality	11	14	1	13	39
Price	1	5	22	22	50
Advertisement	13	15	6	1	35
Brand image	2	7	12	5	26
Total	27	41	41	41	150

Chi – Square Tests:

Factors	Calculation value	do	Table value	Remarks
Person chisquare	27.551 ^a	8	15.51	Rejected

Source primary data

INTERPRETATION

Hence the p value is grater then 0.05, so, null hypothesis is accepted which states that there is no

significant relationship between attracting factor of LG products and number of owned LG products.

TABLE 4
SATISFACTION LEVEL ABOUT LG PRODUCTS

Parameters	Highly satisfied	Satisfied	Neutral	Dissatisfied	Strongly disagree	Total	Mean score	Mean	Rank
Satisfaction	62 (310)	48 (192)	27 (81)	13 (26)	0 (0)	150	609	40.60	1
Availability	34 (170)	56 (224)	30 (90)	28 (56)	2 (2)	150	542	36.13	4
Quality	21 (105)	47 (188)	66 (198)	13 (26)	3 (0)	150	520	34.67	6
Product range	44 (220)	55 (220)	40 (120)	11 (22)	0 (0)	150	582	38.80	3
Purchase Experience	13(65)	10 (40)	66 (198)	35 (70)	8 (8)	132	381	25.40	8



Usage Experience	44 (220)	56 (224)	42 (126)	8 (16)	0 (0)	150	586	39.07	2
Market Strategy	35 (175)	31 (124)	71 (213)	12 (24)	1 (1)	150	537	35.80	5
Service	18(90)	62 (248)	46 (138)	20 (40)	4(4)	150	520	34.67	7

INTERPRETATION

The above table result it is found that Satisfaction ranks 1, Usage experience ranks 2, Product range ranks 3, Availability ranks 4, Market strategy ranks 5, Quality ranks 6, Service ranks 7 and Purchase experience ranks 8.

Majority of the respondents say Satisfaction about LG products

FINDINGS OF THE STUDY

- Here majority 54% of the respondents were male.
- Here mostly 44% of the respondents age is 30-40 years...
- Here majority 53% of the respondents were unmarried.
- Here mostly 44% of the respondents education level is college level. Here mostly 44% of the respondents income is Rs 20,000-40,000.
- Here majority 51% of the respondents say LG products is highly recommended.
- Here mostly 37% of the respondents say Bosh is the major competitors for LG electronics.
- There is no significant relationship between attracting factor of LG products and number of owned LG products.
- Majority of the respondents say Satisfaction about LG products ranks 1.

SUGGESTIONS

- Companies should take steps to attract more male customers.
- Company should try to cover customers in all age group.
- The company can also increase their advertisement for their products.
- At time of festival offer quality may not be so good when compared to other seasonal offers.
- Company should give better quality of products and service to customers.
- The company can also increase their life time of their product for increase sales.

- The company should enhance their advertisements by highlighting the various technical advantages in their LG product.
- The customers should also take sufficient time to collect more information about their product so as to purchase the product. The company should make a survey to know the expectations of the consumers and produce that product in the manner so as to attract more customers towards their brand.

CONCLUSION

It has been observed that most customers are satisfied with pre sales services similarly most of these customers are dissatisfied with the post sales service which is the matter of concern for the company. LG Products need to improve some parts of bikes specifically the interiors. High customer satisfaction level helps the company to retain its existing customer as well as generate new customer through word to mouth publicity. Hindustan Unilever Limited has great offers for their customers that acts as the motivating factor which brings the customers to LG. Most of the customers are satisfied with the LG.

Customers feel that LG have variety of brands available in various departments and also feel that shopping with LG is convenient and saves their valuable time. This is due to the proper facility that is available in LG. The customers are very loyal towards LG; hence they want to visit LG again and say that they definitely like to visit LG again. This shows that customers are satisfied with their service while shopping at LG. Hence sales and service at LG is good.



THE NUTRITIONAL ANAEMIA AND ITS RELATION BY THE EATING OF CHEESE OR YOGURT AMONG PREGNANT WOMEN IN ELOBIED CITY, WEST OF SUDAN

Tahani Ahmed Mahmoud Doudi¹, Mirghany Elnager Ahmed Ibrahim²
*Mohammed Ismail Humaida³

¹Ministry of Health, North Kordofan State, Sudan

²Department of Food Hygiene & Safety, Faculty of Public & Environmental Health,
University of Kordofan, Sudan.

³Department of Epidemiology, Faculty of Public & Environmental Health, University of Kordofan,
Sudan

*Corresponding Author: Dr. Mohammed Ismail Humaida ³Department of Public Health, College of Public Health & Health Informatics, University of Hail, Kingdom of Saudi Arabia,

ABSTRACT

BACKGROUND: This study was conducted at the Obstetrics and Gynecological Hospital in Elobied City - North Kordofan State, West of Sudan, in the period from December 2017 to December 2019, to detect the presence of nutritional anaemia among pregnant women, and to study the relation between the presence of anemia and eating the cheese or yogurt with the meal among the pregnant women.

METHODS: Systematic random sampling method was used to select 384 pregnant women. Data were collected by questionnaire and a blood samples were taken from all women chosen and analyzed by Mindray Haematology Analyzer to measure the hemoglobin level to detect the presence of anaemia. The data of questionnaire were analyzed by SPSS and the results presented in tables and figures showing the percentages. The Chi-square test (McNemar's test) was used to find the relation between the presence of anaemia and eating of cheese or yogurt.

RESULTS: Most pregnant women (75%) were have anemia. Most pregnant women (61.5%) were eating cheese or yogurt with the nutritional meal. Conclusion: The study discovered that there is a relation between eating of cheese or yogurt with the meal and the presence of anaemia, where the eating of cheese or yogurt with the meal contributed to the presence anemia with 45.1%. This study recommended the pregnant women to eat cheese or yogurt with separate time of nutritional meal (not with the meal).

INTRODUCTION

Anaemia, defined as a decreased concentration of blood hemoglobin, is one of the most common nutritional deficiency diseases observed globally and affects more than a quarter of the world's population [1]. Anaemia is a major cause of morbidity and mortality of pregnant women and increases the risks of foetal, neonatal and infant mortality [2].

Anaemia during pre g-nancy contributes to 20% of all maternal deaths [3]. Iron deficiency is the cause of 75% of anaemia cases during pregnancy [4]. According to UNICEF [5] the causes of iron deficiency are: too little iron in the diet, poor absorption of iron by the body, and loss of blood (including from heavy menstrual bleeding). It is also caused by lead poisoning in children. Nutritional



Anaemia develops slowly after the normal stores of iron have been depleted in the body and in the bone marrow. Women, in general, have smaller stores of iron than men and have increased loss through menstruation, placing them at higher risk for nutritional anaemia. High-risk groups include: women of child-bearing age who have blood loss through menstruation; pregnant or lactating women who have an increased requirement for iron; infants, children, and adolescents in rapid growth phases; and people with a poor dietary intake of iron through a diet of little or no meat or eggs for several years.

Source of iron: Non-vegetarian dietary sources of iron are red meat, fish, liver, and egg yolks; vegetarian sources include lentils and beans, whole grains and products made from these foods [5].

Forms of iron: There are two forms of iron, haem-iron and non-haem iron. Haem-iron is better absorbed than non-haem iron. Foods rich in haem-iron are liver, meat, poultry and fish. Foods containing non-haem iron are those of vegetable origin, e.g., cereals, green leafy vegetables, oilseeds, and dried fruits. The bioavailability of non-haem iron is poor owing to the presence of phytates, oxalates, carbonates, phosphates and dietary fibre which interfere with absorption. (6) iron

Calcium: As published by Tidehag (7) : Calcium has been shown to inhibit iron absorption in both rats and man. Giving 165 mg Ca as milk, cheese or calcium chloride reduced absorption by 50-60% . Calcium inhibits the absorption of both heme and nonheme iron.

Sources of calcium: The milk and milk products like yogurt and cheese are the richest sources of calcium. The presence of large quantities of calcium in nutritional meal is conflicted with iron absorption [8]

objectives: To detect the presence of nutritional anaemia among pregnant women, and to study the relation between the presence of anemia and the eating of cheese or yogurt with the meal among the pregnant women.

METHODOLOGY

Study type and design: descriptive- cross sectional study.

Study Area : Elobied city, at Obstetrics and Gynecology Hospital which includes the departments ofaccidents, intensive care, laboratory, pharmacy, and referring clinic.

Study population : All the pregnant women attending antenatal care clinic (ANC) at Obstetrics and Gynecology Hospital in Elobied city during the study period.

Inclusion criteria : Mothers who attended antenatal care clinic (ANC) during the period from 15th August to 15th September, 2019 and who met the choosing criteria (systemic random sample) had chosen.

Sampling :

a / **Sample size :** The sample size was determined according to Le (9) by the following formula:

$$n = \frac{z^2 pq}{d^2}$$

Where:

n is sample size.

Z is the value of the standard normal variable corresponding to 95% level of significance (z = 1.96).

p is the prevalence of VL (p = 0.5) and (q = 1 -p) since no prior information exist.

d is a marginal error (d =0.05)

Accordingly, a sample of 384 persons will be obtained.

b / Sample Technique : The systematic random sample was used.

Data Collection Methods and tools :

In this study a structured pre-coded and close-ended questionnaire was used to collect data . Some health workers was trained to assist in filling the questionnaire. Blood samples were collected in (2.5ml).

DATA ANALYSIS

The blood samples were analyzed in the laboratory of the hospital by Mindray Haematology Analyser to measure the level of hemoglobin. The cut-off points for the diagnosis of anaemia was according to the hemoglobin level as mentioned by park (10), where A hemoglobin level of 10 to 11 g/dl has been defined as early anaemia; a level below 10 g/dl as marked anaemia.

The data of questionnaire were analyzed by statistical package for social sciences (SPSS) . The results were presented in figures and tables showing the percentages. The relations between some variables and the infection by anaemia were done according to Al Qassas (11) and Le (12) by McNemar,s test (Chi- square (X²) test) for the correlative percentages in the table (2x2) by the formula:

$$X^2 = \frac{(B - C)^2}{B + C}$$

Where:

B and C are cells in the table 2x2 (without the cells of the total) as in the following shape:

A	B
C	D



The value of χ^2 obtained from this formula compared with the value of χ^2 obtained from the table of χ^2 (appendix B). The result have statistical significance when the calculated value is larger than the tabulated value under significance level (0.05). The null hypothesis is rejected at the 0.05 level when $\chi^2 \geq 3.84$.

Ethical considerations :

Permissions for the study was obtained prior to collect data, by contacting and receiving the approvals from the competent directors in the Obstetrics and Gynecology Hospital, also the participants women in the study had assured with that the data needed from them will be in complete

confidence, and used only for scientific research purposes .

RESULTS

As illustrated in table 1, anemia was found in 75% of pregnant women (23.4% of them have marked anemia and 51.6 % of them have early anemia). Table 2 explained that 61.5% of pregnant women were eating the cheese or yogurt in the nutritional meal. Table 4 showed that 45.1% of anemic pregnant women were eating the cheese or yogurt in the meal. Table 3 showed the foods that eaten every day during pregnancy period, where 13.5% of them were eating meat, 47.9% of them were eating dairy products.

Table (1): Distribution of pregnant women attending ANC in Elobeid City according to hemoglobin Level -- September, 2019

Hemoglobin Level (g/dl)	Frequency	Percentage	Diagnosis of anaemia
5-9.9 g/dl	90	23.4%	Marked anaemia
10- 11 g/dl	198	51.6%	Early anaemia
<11 g/dl	96	25%	Normal
Total	384	100%	-

Table (2): Distribution of pregnant women according to eating the cheese or yogurt with the meal - September, 2019

Eating the cheese or yogurt in the meal	Frequency	Percent
Yes	236	61.5%
No	148	38.5%
Total	384	100%

Table (3):Distribution of pregnant women according to foods that eaten every day during the pregnancy period - September, 2019

The foods that eaten every day	Frequency	Percent
Meats	52	13.5
Eggs	20	5.2
They are all true	40	10.4
Dairy products	184	47.9
Orange	76	19.8
Tomato	6	1.6
Vegetables	6	1.6
Total	384	100%

Table (4) :The relation between the anemia and the eating of cheese or yogurt among the pregnant women in Elobied city - 2019

The presence of anemia	Eating of cheese or yogurt		Total
	Yes	No	
Present	173(45.1%)	115 (29.9%)	288(75%)
Not present	63(16.4%)	33(8.6%)	96(25%)
Total	236(61.5%)	148(38.5%)	384(100%)

N = 384, McNemar's test (χ^2) : calculated = 3.93 and tabulated = 3.84 . Significant level = 0.05



DISCUSSION

This study showed that anemia was found in 75% of pregnant women (23.4% of them have marked anemia and 51.6% of them have early anemia as in table 1. This evaluation was according to what mentioned by Park (14): "A hemoglobin level of 10 to 11 g/dl has been defined as early anaemia; a level below 10 g/dl as marked anaemia.

The factor that contributes to this presence of anaemia among the pregnant women, was the ingestion of yogurt or cheese with nutritional meal, where the yogurt or cheese in nutritional meal provides a large quantity of calcium in meal, because the calcium is found in milk and milk products as mentioned by WHO (8): "The milk and milk products like the yogurt and cheese are the richest sources of calcium". The presence of calcium in nutritional meal affects on iron absorption that found in the nutritional meal, and causes iron deficiency, and thus the anemia is occurred in pregnant women. This opinion was according to what mentioned by WHO (8): "The presence of large quantities of calcium in nutritional meal is conflicted with the iron absorption". In addition to that as it observed in table 3, the high percentage for foods that eaten every day during the pregnancy period were dairy products (47.9%) which contain the calcium as mentioned by WHO (8): "The milk and milk products are the richest sources of calcium". And this Calcium inhibits the absorption of haem and non-haem iron that found in meat and other foods that mentioned in table 3. This corresponds with what mentioned by Tidehag (7) and Tekeste (12): "Calcium inhibits both haem and non-haem iron absorption". Therefore the dairy products contribute to the anemia among pregnant women.

Statistically, the results of table 4 showed that the high percentage (45.1%) of the presence of anemia belongs to eating the cheese or yogurt with the meal, and the minimum percentage (29.9%) of the presence of anaemia belongs to lack of eating the cheese or yogurt with the meal. Those results prove that the eating of cheese or yogurt with the meal increases the presence of anemia cases. This result was have statistical significance, because the calculated value of McNemar's test (X^2) was larger than the tabulated value ($4.92 > 3.84$) under the significance level 0.05.

CONCLUSION

The study discovered that eating of cheese or yogurt with the meal contributed to the anemia with 45.1%. This study recommended the pregnant women to eat cheese or yogurt with separate time of nutritional meal (not with the meal) to enhance the absorption of iron from the nutritional meal.

Acknowledgement: First we grateful to the God who succeed us to do this work.

We grateful to everyone who helped us to do this study in any step.

REFERENCES

1. WHO/CDC . *Worldwide Prevalence of Anaemia 1993-2005: WHO Global Database on Anaemia*. WHO Press, Geneva, Switzerland. 2008.
2. Akhtar, M. and Hassan, I. *Severe Anaemia during Late Pregnancy . Case Reports in Obstetrics and Gynecology*, 2012, Article ID : 485452. <http://dx.doi.org/10.1155/2012/485452>.
3. World Health Organization. *Vitamin and Mineral Nutrition Information System Evidence and Programme Guidance Unit Nutrition for Health and Development*. World Health Organization, Geneva. 2015.
4. Balarajan, Y., Ramakrishnan, U., Ozaltin, E., Shankar, A.H. and Subramanian, S.V. *Anaemia in Low-Income and Middle-Income Countries . The Lancet*, 2011. 378, 2123-2135. [http://dx.doi.org/10.1016/S0140-6736\(10\)62304-5](http://dx.doi.org/10.1016/S0140-6736(10)62304-5).
5. UNICEF. *Prevention and Control of Nutritional Anaemia: A South Asia Priority*. United Nations Children's Fund - Regional Office for South Asia. 2002.
6. Park, K. *Preventive and Social Medicine*. 23th edition. Mr. Brij Mohan Bhanot. India 2015.
7. Tidehag, Per. *Iron Absorption and Iron Status Related to Diet An Experimental and Epidemiological Study*. Per Tidehag (1995).
8. WHO, *the medical textbook: food and nutrition, second edition., international academy*. 2005.
9. Le, Ch ap T. *Introductory Biostatistics*, John Wiley & Sons Inc, New Jersey, PP452. 2003.
10. Park, K. *Preventive and Social Medicine*. 23th edition. Mr. Brij Mohan Bhanot. India 2015.
11. Al Qassas, Mahdi Muhammad. *Principles of statistics and social measurement*. Amer for printing and publishing. Mansoura University. 2007. Available at: <http://www.mahdyelkassas.name.eg/books/stati.pdf>. Accessed on 3 June 2020.



THE FACTORS CONTRIBUTED TO PRESENCE OF ANAEMIA AMONG THE PREGNANT WOMEN IN EL-OBIED CITY-NORTH KORDOFAN STATE-SUDAN

**Mirghany Elnager Ahmed Ibrahim¹, Tahani Ahmed Mahmoud Doudi²,
*Mohammed Ismail Humaida³**

¹*Department of Food Hygiene & Safety, Faculty of Public & Environmental Health, University of Kordofan, Sudan.*

²*Ministry of Health, North Kordofan State, Sudan.*

³*Department of Epidemiology, Faculty of Public & Environmental Health, University of Kordofan, Sudan*

**Corresponding Author: Dr. Mohammed Ismail Humaida³ Department of Public Health, College of Public Health & Health Informatics, University of Hail, Kingdom of Saudi Arabia,*

ABSTRACT

Background: This study was conducted at the Obstetrics and Gynecology Hospital in Elobied City - North Kordofan State, West of Sudan, in the period from December 2017 to December 2019, to detect the presence of anaemia and the factors contributed to its presence among the pregnant women.

Methods: Systematic random sampling method was used to select 384 pregnant women. Data were collected by questionnaire and a blood samples were taken from all women chosen and analyzed by Mindray haematology analyzer to measure the hemoglobin level to detect the presence of anaemia. The data of questionnaire were analyzed by SPSS. The results presented in tables and figures showing to the percentages. The Chi-square test (McNemar's test) was used to find the relation between the presence of anaemia and some variables.

Results: It found that 23.4% of the pregnant women had marked anaemia, 51.6% of them had early anaemia. Also 44% of the pregnant women were affected by malaria during pregnancy period. Most pregnant women (93.2%) were exposed to mosquitoes bite. The majority of the pregnant women (98.96%) have insufficient monthly income (few and middle).

Conclusion: the study concluded to that most pregnant women (75%) were have anemia (marked and early anemia). The factors that contributed to the presence of anaemia among the pregnant women are: The insufficient monthly income (few and middle) contributed with 74.22% , The exposure to mosquitoes bite (70.3%), Lack of knowledge of pregnant women about anemia (45.3%) and the affecting by malaria during pregnancy period (32.3%).

KEY WORDS: Anaemia, Pregnant, Women, El-Obied , Sudan



INTRODUCTION

Anaemia, defined as a decreased concentration of blood hemoglobin, is one of the most common nutritional deficiency diseases observed globally and affects more than a quarter of the world's population [1]. Anaemia is a major cause of morbidity and mortality of pregnant women and increases the risks of foetal, neonatal and infant mortality [2]. Anaemia during pregnancy contributes to 20% of all maternal deaths [3]. Iron deficiency is the cause of 75% of anaemia cases during pregnancy [4,5]. Even though there may be many causes of anaemia, dietary iron deficiency is usually either the main or a major contributing factor. Other significant nutritional deficiencies (e.g. low intakes of folic acid and vitamins A, B₁₂, and C) and infectious diseases (e.g. malaria and hookworm) may also contribute to anaemia (6). Several other possible causes should be noted. These include haemolysis occurring with malaria; glucose-6-phosphate dehydrogenase deficiency; congenital hereditary defects in haemoglobin synthesis; and deficits in other nutrients, e.g. vitamins A, B₁₂, and C, and folic acid. Blood loss such as that associated with schistosomiasis, hookworm infestation, can also result in both iron deficiency and anaemia (6). Iron deficiency is most common among groups of low socioeconomic status. The prevalence of iron deficiency varies greatly according to host factors: age, gender, physiological, pathological, environmental, and socioeconomic conditions (6). Poor socio-economic status and low family income may have also contributed to high prevalence of anemia in the study location. The prevalence was higher in poorly educated women, women with large family size, and those who had poor income. Women's employment has the potential to benefit household nutrition through increased household income. Large family sizes and increased number of children as seen in this study affected the food available to the family. With more people sharing limited quantity of food, the portion size available to each member of the family will definitely be reduced. When food is not enough, mothers usually gave up their share for their children. These findings strongly raise the issue of the awareness of mothers towards their health (7).

Objectives: To detect the presence of anaemia among the pregnant women. To determine the factors contributed to the presence of anemia among the pregnant women.

METHODOLOGY

Study type and design: descriptive- cross sectional study.

Study Area: The study was conducted at Obstetrics and Gynecology Hospital in Elobied city, Sudan. The hospital includes the departments of accidents, intensive care, laboratory, pharmacy, and ante natal care clinic (ANC).

Study population : All the pregnant women attending ante natal care clinic (ANC) at Obstetrics and Gynecology Hospital in Elobied city during the study period.

Inclusion criteria : Mothers who attended antenatal care clinic (ANC) during the period from 15th August to 15th September, 2019, and who met the choosing criteria (systemic random sample) had chosen.

Sampling :

a / **Sample size :** The sample size was determined according to Le [8] by the following formula:

$$n = \frac{z^2 pq}{d^2}$$

Where:

n is sample size.

Z is the value of the standard normal variable corresponding to 95% level of significance (z = 1.96).

P is the prevalence of VL (p = 0.5) and (q = 1 - p) since no prior information exist.

d is a marginal error (d = 0.05)

Accordingly, a sample of 384 persons was obtained.

b / **Sample Technique :** The systematic random sample was used.

DATA COLLECTION METHODS AND TOOLS

In this study a structured pre-coded and close-ended questionnaire was used to collect data. Some health workers were trained to assist in filling the questionnaire. Blood samples were collected in (2.5ml).

Data analysis

The blood samples were analyzed in the laboratory of the hospital by Mindray haematology analyzer to measure the level of hemoglobin. The cut-off points for the diagnosis of anaemia was according to the hemoglobin level as mentioned by Park (9), where A hemoglobin level of 10 to 11 g/dl has been defined as early anaemia; a level below 10 g/dl as marked anaemia. The data of questionnaire were analyzed by statistical package for social sciences (SPSS). The results were presented in figures and



tables showing the percentages. The relation between some variables and the the presence of anaemia was done according to Al-Qassas (10) and Le (8) by McNemar's test (Chi- square (X^2) test) for the correlative percentages in the table (2x2) by the formula:

$$X^2 = \frac{(B - C)^2}{B + C}$$

Where: B and C are cells in the table 2x2 (without the cells of the total) as in the following shape:

A	B
C	D

The value of x^2 obtained from this formula compared with the value of x^2 obtained from the table of x^2 . The result have statistical significance when the calculated value is larger than the tabulated value under significance level (0.05). The null hypothesis is rejected at the 0.05 level when $X^2 \geq 3.84$.

Ethical Considerations

Permissions for the study was obtained prior to collect data, by contacting and receiving the approvals from the competent directors in the

Obstetrics and Gynecology Hospital, also the participants women in the study had assured with that the data needed from them will be in complete confidence, and used only for scientific research purposes.

RESULTS

As illustrated in table 1, anemia was found in 75% of pregnant women (23.4% of them have marked anemia and 51.6% of them have early anemia). Table 2 shows that 93.2% of pregnant women had exposed to mosquitoes bites (70.3% of them were anaemic as in table 3). Table 4 shows that 44% of pregnant women were affecting by malaria during pregnancy period (32.3% of them were anaemic as in table 5). Table 6 shows the monthly income for pregnant women, where 10.42% of them have few income, 88.54% of them have middle income and 1.04% of them have high income (74.22% of non high income [few and middle income] were anaemic as in table 7).

Table (1): Distribution of pregnant women attending ANC in Elobeid City according to the hemoglobin level - September, 2019

Hemoglobin Level (g/dl)	Frequency	Percentage	Diagnosis of anaemia
5-9.9 g/dl	90	23.4%	Marked anaemia
10- 11 g/dl	198	51.6%	Early anaemia
<11 g/dl	96	25%	Normal
Total	384	100%	-

Table (2) :Distribution of pregnant women attending ANC in Elobeid City according to exposure to the

The exposure to mosquitoes bite	Frequency	Percent
Yes	358	93.2
No	26	6.8
Total	384	100%

mosquitoes bite - September, 2019

Table (3):The relation between the presence of anemia and the exposure to mosquitoes bite among the pregnant women in Elobied city – September, 2019

The presence of anemia	The exposure to mosquitoes bite		Total
	Yes	No	
Present	270(70.3%)	18(4.7%)	288(75%)
Not present	88(22.9%)	8(2.1%)	96(25%)
Total	358(93.2%)	26(6.8%)	384(100%)

N = 384, McNemar,s test (X^2) : calculated = 48 and tabulated = 3.84 , Significant level = 0.05.

**Table (4): Affecting by malaria during pregnancy period among pregnant women attending ANC in Elobeid City - September, 2019**

Affecting by malaria during pregnancy period	Frequency	Percent
Yes	169	44
No	215	56
Total	384	100%

Table (5) :The relation between the presence of anemia and the affecting by malaria among the pregnant women in Elobied city - September, 2019

The presence of anemia	Affecting by malaria during pregnancy period		Total
	Yes	No	
Present	124(32.3%)	164(42.7%)	288(75%)
Not present	45(11.7%)	51(13.3%)	96(25%)
Total	169(44%)	215(56%)	384(100%)

N = 384, McNemar's test (X^2) : calculated = 17.66 and tabulated = 3.84 , Significant level = 0.05

Table (6): Distribution of pregnant women attending ANC in Elobeid according to monthly income - September, 2019

Monthly income	Frequency	Percent
Few	40	10.42
Middle	340	88.54
High	4	1.04
Total	384	100%

Table (7): The relation between the presence of anemia and the monthly income among the pregnant women in Elobied city - September, 2019

The presence of anemia	Monthly income		Total
	High	Not high (Few + Middle)	
Present	3 (0.78%)	285(74.22)	288(75%)
Not present	1(0.26%)	95(24.74%)	96(25%)
Total	4(1.04%)	380(98.96%)	384(100%)

N = 384, McNemar's test (X^2) : calculated = 73.44 and tabulated = 3.84, Significant level = 0.05

Table (8):Distribution of pregnant women attending ANC in Elobeid City according to the knowledge about anemia - September, 2019

The knowledge about anemia	Frequency	Percent
Yes	151	39.4
No	233	60.7
Total	384	100%

**Table (9): The relation between the presence of anaemia and the knowledge about anemia among the pregnant women in Elobied city – September, 2019**

The presence of anaemia	knowledge about anaemia		Total
	Yes	No	
Present	114(29.7%)	174(45.3%)	288(75%)
Not present	37(9.6%)	59(15.4%)	96(25%)
Total	151(39.3%)	233(60.7%)	384(100%)

N = 384 , **McNemar's test (X²)** : calculated = **23.2** and tabulated = **3.84** . Significant level = **0.05**.

DISCUSSION

The results of table 2 explained that 93.2 % of the pregnant women had exposed to mosquitoes bite, and the results of table 3 showed that the high percentage (70.3%) of the presence anemia among pregnant women belongs to the exposure to mosquitoes bite, this result explains that there is strong relation between the exposure to mosquitoes bite and presence of anemia among the pregnant women. This is similar to what mentioned by WHO (6): 'Blood loss ... can also result in both iron deficiency and anaemia'. and the exposure to mosquitoes bite contributed to presence of anemia with 70.3%. Statistically, this results were have statistical significance, because the calculated value of X² was larger than the tabulated value (48 > 3.84) under the significance level 0.05.

As illustrated in table 4, there is 44% of the pregnant women were affected by malaria during pregnancy period. The results illustrated in table 5 showed that there is a relation between affecting by malaria during pregnancy and the presence of anemia among the pregnant women, where it found that 32.3% of the women affected by malaria during pregnancy period have anemia. This means that the affecting by malaria during pregnancy contributed to the presence of anemia by 32.3%. This agree with what mentioned by Oguizu and Chigbundu (3): "Malarial infection leads to anemia through the destruction of red blood cells by the malaria parasites". Statistically this result were have statistical significance, because the calculated value of **McNemar's test (X²)** was larger than the tabulated value (17.66 > 3.84) under the significance level 0.05.

The results of table 6 showed that 1.04% of pregnant women were have high monthly income. The results of table 7 showed that the minimum percentage (0.78%) for the presence of anemia belongs to the high monthly income, while the higher percentage (74.22%) for the presence of anemia belongs to the few and middle monthly income (not high income). This results indicate that there is a relation between the presence of anemia and the monthly income among the pregnant

women, where that the insufficient monthly income(few and middle) contributed to the presence of anemia with 74.22%, and the high monthly income reduced the cases of anemia. This results correspond with what mention by Oguizu and Chigbundu(3): "The prevalence of anaemia was higher in those who had poor income" . Statistically this results were have statistical significance, because the calculated value of McNemar's test (X²) was larger than the tabulated value (73.44 > 3.84) under the significance level 0.05.

As it demonstrated in table 8, there is 60.7% of the pregnant women have no knowledge about anemia. The results of table 9 showed that the high percentage (45.3%) of the presence of anemia belongs to lack of knowledge about anemia, the minimum percentage (29.7%) of the presence of anemia belongs to the knowledge about anemia. Those results confirm that lack of knowledge about anemia increases the presence of anemia in the pregnant women. Statistically this results were have statistical significance, because the calculated value of X² was larger than the tabulated value (23.2 > 3.84) under the significance level 0.05, therefore the lack of knowledge about anemia is consider one of the most important factors contributed to anemia in pregnant women in Elobeid City. These results proved that the lack of knowledge about anemia contributes to the presence of anaemia in pregnant women.

CONCLUSION

Most pregnant women (75%) were have anemia (marked and early anemia). The factors that contributed to the presence of anaemia among the pregnant women are: The insufficient monthly income(few and middle) contributed to the presence of anemia with 74.22%. The exposure to mosquitoes bite contributed to presence of anemia with 70.3%. Lack of knowledge of women about anemia contributed to the presence of anemia with 45.3%. The affecting by malaria during pregnancy contributed to the presence of anemia by 32.3%.



Acknowledgement

First we grateful to the God who succeed us to do this work. We grateful to everyone who helped us to do this study in any step.

REFERENCES

1. WHO/CDC. *Worldwide Prevalence of Anaemia 1993-2005: WHO Global Database on Anaemia*. WHO Press, Geneva, Switzerland. 2008.
2. Akhtar, M. and Hassan, I. *Severe Anaemia during Late Pregnancy . Case Reports in Obstetrics and Gynecology*, 2012, Article ID : 485452. <http://dx.doi.org/10.1155/2012/485452>.
3. World Health Organization. *Vitamin and Mineral Nutrition Information System Evidence and Programme Guidance Unit Nutrition for Health and Development*. World Health Organization, Geneva. 2015.
4. Balarajan, Y., Ramakrishnan, U., Ozaltin, E., Shankar, A.H. and Subramanian, S.V. *Anaemia in Low-Income and Middle-Income Countries . The Lancet*, 2011. 378, 2123-2135. [http://dx.doi.org/10.1016/S0140-6736\(10\)62304-5](http://dx.doi.org/10.1016/S0140-6736(10)62304-5).
5. Haidar, J. (2010) *Prevalence of Anaemia, Deficiencies of Iron and Folic Acid and Their Determinants in Ethiopian Women*. *Journal of Health, Population and Nutrition*, 28, 359-368. <http://dx.doi.org/10.3329/jhpn.v28i4.6042>
6. WHO. *Iron Deficiency Anaemia: Assessment, Prevention, and Control (A guide for programme managers)*. world health organization. 2001. available at: www.int. > publications.
7. Oguizu AD* and Chigbundu SJ, *Assessment of Anaemia and Dietary Intake of Pregnant Women in Ikwuano Local Government Area Abia State, Nigeria*. *J Hum Nutr Food Sci* 4(2): 10852016.
8. Le, Ch ap T. *Introductory Biostatistics*, John Wiley & Sons Inc, New Jersey, PP452. 2003.
9. Park, K. *Preventive and Social Medicine*. 23th edition. Mr. Brij Mohan Bhanot. India 2015.
10. Al Qassas, Mahdi Muhammad. *Principles of statistics and social measurement*. Amer for printing and publishing. Mansoura University. 2007. Available at: <http://www.mahdyelkassas.name.eg/books/stati.pdf>. Accessed on 3 June 2020.



DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE MUCOSA OF THE ORAL CAVITY

Axunjonova Gulnozaxon Muxammadsobirovna

Resident of the Department of Therapeutic Dentistry

ABSTRACT

Objective: Analysis of the results of observation of clinical cases of diseases of the oral mucosa in order to differentiate existing foci for correct diagnosis and subsequent treatment.

Materials and methods: Variants of pathological changes related to the group of white lesions: multiform erythema, flat lichen, candidiasis glossitis at the stage of formation of white foci.

Results: In this paper we consider the differential diagnosis of multiform erythema, planar lichen, candidiasis glossitis in the presence of signs of white plaque. Clarification of the diagnosis is based on a thorough examination and additional (including laboratory) research methods.

Conclusion: The analysis of clinical cases of diseases of the oral mucous membrane indicates the similarity of their elements of destruction and manifestations of other symptoms, which greatly complicates the diagnostic search. A thorough survey, inspection, consultations of general specialists and additional laboratory tests allow to successfully solve the tasks.

KEYWORDS: *erythema multiforme, oral lichen planus, candidal glossitis.*

INTRODUCTION

The relevance of the problem. Diagnosis of diseases of the oral mucosa causes significant difficulties, which is associated with a number of reasons. One of them – the lack of clinical experience-is explained by the low number of cases of patients with this pathology: the overwhelming amount of work of a dentist-therapist is dental treatment [3, 4, 8]. The next – the actual distinctive features of diseases of the mucous membrane, often manifested by true or false polymorphism. The latter "blurs" the clinical picture, complicating the diagnosis. In addition, individual diseases are characterized by similarity of morphological elements, as well as complaints or anamnesis.

Finally, the addition of a secondary infection contributes to the development of inflammation with bright clinical symptoms that mask the main picture of the lesion of the SOPR. In turn, the general state of the body and the local status can have a significant impact on the clinical manifestation of the pathology [1, 9].

With all the objective complexity of the diagnostic process, the patient's attitude to his disease plays a significant role. There may be a fear of infecting others, aggravity in the presentation of complaints, hidden or obvious carcinophobia [2, 7]. This situation requires a thorough survey of complaints and anamnesis, followed by a comparative analysis of clinical manifestations.



FIG:1

FIG :2

Fig. 1. The entire surface of the tongue

Fig. 2. Remnants of blisters on the cheek mucosa is covered with a whitish film

In the clinic of therapeutic dentistry, there are traditionally two main approaches to the study and description of lesions of the oral mucosa. One involves considering the occurrence and sequential development of pathological manifestations of a specific nosological unit. The elements of the lesion in this case are described in the order of their appearance or detection on the mucous membrane [5, 6]. Another approach involves the identification of diseases based on the description of the leading symptom (syndrome). The classification in this variant is as follows: red soft tissue lesions-limited, generalized, glossitis; red and white foci; white-keratotic, necrotic; ulcers – erosions, cracks; fistulas; brown, blue or black lesions; yellow lesions. Improving the knowledge and skills of a specialist in the field of identifying and then identifying a pathological focus is facilitated not only by visual observation of the elements of the lesion, but also by its accurate description in the medical history.

This paper presents an analysis of the results of observation of clinical cases of oral mucosa diseases that require differentiation of existing foci for the correct diagnosis and subsequent treatment.

MATERIALS AND METHODS

We included variants of pathological changes belonging to the group of so-called white lesions: erythema multiforme, lichen planus, candida glossitis at the stages of formation of white foci. Additional laboratory tests and consultations of specialized specialists were prescribed.

Clinical case 1

Patient N. complained of a rise in temperature to 39°C, shortness of breath, headache, pain in the joints, muscles, followed by rashes on the oral mucosa (mouth, lip rims).

In the past, there were relapses, which were seasonal in nature (spring and autumn). Periodically, the disease occurred in a permanent type, when relapses are continuous for several months.

From the anamnesis, it turns out that the patient was treated in the hospital the day before, among the medicines were

sulfonamides, antibiotics, etc. The influence of the alimentary factor is not excluded, since there is an allergy to citrus fruits. The trigger point in the development of erythema multiforme (ME) in the patient can be considered a herpetic infection, which at the beginning of the disease played the role of a trigger agent.

Suddenly there was hyperemia and pronounced puffiness of the entire surface of the SOPR. Against this background, after 1-2 days, blisters formed, which are opened and in their place there are painful erosions, very extensive, covering the entire oral mucosa and lips. When viewed from the surface of the tongue is covered with bloom, in appearance resembling that of candidiasis (Fig. 1). When removing the plaque from the language detected erosive surface and bleeding occurs (Fig. 4). On the inner surface of the cheeks in the retro molar region are also found the remains of the bubbles, plaque erosion (Fig. 2).

On the red border of the lips at the surface of the erosions, bloody crusts of different thickness are formed, making it difficult to open the mouth.

Due to sharp soreness, abundant discharge from the surface of erosions, salivation, eating is difficult. Poor hygiene of the mouth, periodontitis aggravates the process. In contrast to pemphigus, a negative symptom of Nikolsky is characteristic.

In the smears-prints, the cells of the Tsank were not found.

The reverse development of the process proceeds slowly on the oral mucosa (3-5 weeks).

If in the presence of typical cocardiform elements on the skin, the identification of multiform erythema is not difficult, then with an isolated lesion of the oral mucosa, diagnosis is often difficult. In these cases, differential diagnosis should be made with vulgar pemphigus, benign non-antholytic pemphigus, herpetic stomatitis, erosive papules of secondary syphilis.



In contrast to pemphigus with erythema multiforme, there is an acute onset with rapid dynamics of rashes, blisters that are located on an inflamed background persist for some time, the Nikolsky symptom is negative, there are no acantholytic cells in the smears-prints. The acute onset, the severity of inflammatory phenomena, and the cyclical course distinguish ME from benign non-antholytic pemphigus.

In acute herpetic stomatitis, there is a grouping of lesions, as a result of which erosions with fine-grained edges are formed. Their most typical localization is the vestibular surface of the lips, hard and soft palate, lateral surfaces of the tongue, cheeks, gums, and transitional folds. Typical herpetic rashes on the skin in the form of bubbles after opening are covered with a crust. Cytological examination reveals giant epithelial cells.

Based on the clinical picture and additional studies, the diagnosis was made: Erythema multiforme.

Thus, simultaneously with inflammatory changes in the tongue, candida lesions of the cheeks, hard palate and pharynx are noted.

There is a characteristic feature-foamy saliva, collecting in the retro molar area and on the back of the tongue. A subjective feeling of dryness in the oral cavity, discomfort appears against the background of a sufficient amount of saliva. Candida stomatitis, diagnosed on the basis of the determination of clinical signs, is confirmed by the results of microscopic and cultural studies of unpainted and colored preparations, which is a necessary stage in the laboratory diagnosis of candidiasis.

Microscopic examination of the material reveals Candida fungi in the form of yeast-like cells and pseudomycelia.

Candida stomatitis is differentiated from hyperkeratosis (with leukoplakia, lichen planus, the white film does not separate when scratching), syphilis (plaques have a dense base, combined with rashes on other parts of the mucous membrane and skin), glossodynia (burning, discomfort in the tongue

disappear during meals). Patients with candida glossitis note a burning sensation, soreness and dryness of the tongue, pain during meals. Possible perversion of taste sensations.

Differential diagnosis of candidiasis of the red border of the lips is carried out with independent cheilitis (exfoliative, meteorological, actinic), bacterial damage, the manifestation of hypovitaminosis. In candidiasis, the lesion of the lip border is manifested by dryness, hyperemia, edema, peeling. Painful erosions, small cracks, thin gray scales may occur. Subjective sensations consist in tension, burning.

To establish and confirm the diagnosis of candidiasis, complex laboratory tests are necessary in dynamics – microscopic, cultural (with the determination of the type of fungus), in some cases – histopathological. In order to detect candida allergy and other immunological changes in the body of patients, intradermal tests, complement binding reactions, indirect hemagglutination, immuno-electrophoresis, macrophage migration inhibition test, neutrophil damage index, RIF-80 and other reactions with candida antigen are used.

A thorough examination of the patient with additional consultations allows us to confirm the diagnosis: acute pseudomembranous candidiasis, accompanying HIV infection.

CONCLUSION

The analysis of clinical cases of oral mucosa disease indicates the similarity of their lesion elements and the manifestations of other symptoms, which significantly complicates the diagnostic search. A thorough survey, examination, consultation of general specialists and additional laboratory tests allow you to successfully solve the tasks. A detailed description of the lesions contributes to the effective assimilation of new information and the possibility of comparing the obtained picture with the data from the literature or other sources (methodological guide, instructions).

vol.56, no.1, pp.2–4. (in Russian).

REFERENCES

1. Gazhva S.I., Igolkina N.A. Vzaimosvyaz' zabolevaniy vnutrennikh organov i sos- toyaniya polosti rta [Interrelation of diseases of internal organs and the state of the oral cavity]. *Terapevticheskiy arkhiv*, 2013, vol.85, no.10, pp.116–118. (in Russian).
2. Gileva O.S., Libik T.V. Predrakovyye zabolevaniya v strukture patologii slizistoy obolochki polosti rta [Precancerous diseases in the structure of pathology of the oral mucosa]. *Problemy stomatologii*, 2013, vol.2, pp.3–9. (in Russian).
3. Dzugayeva I.I. Rasprostranennost' zabolevaniy slizistoy obolochki polosti rta i gub sredi vzroslogo naseleniya [The prevalence of diseases of the mucous membrane of the mouth and lips among adults]. *Institut stomatologii*, 2014, vol.62, no.1, pp.32–33. (in Russian).
4. Kuz'mina E.M. Rol' deyatelnosti VOZ v otsenke zdorov'ya polosti rta naseleniya na osnove monitoringa stomatologicheskoy zabolevayemosti [The role of WHO in assessing oral health of the population based on monitoring of dental morbidity]. *Dental Forum*, 2015, vol.56, no.1, pp.2–4. (in Russian).
5. Lutskeya I.K. Zabolevaniya slizistoy obolochki polosti rta: 2-ye izd [Diseases of the oral mucosa]. M.: Meditsinskaya literatura, 2014, 224 p.
6. Lutskeya I.K., Zinovenko O.G., Andreyeva V.A. Proyavleniya VICH-infitsirovaniya (SPIDa) na slizistoy obolochke polosti rta u detey [Manifestations of HIV infection (AIDS) on the mucous membrane of the oral cavity in children]. *Pediatrics*, 2015, vol.3, pp.18–22. (in Russian).
7. Neyman O.I. Diagnostika raka slizistoy rta i rotoglotki [Diagnosis of cancer of the oral mucosa and oropharynx]. *Onkologicheskii zhurnal*, 2010, vol.4, no.2, pp.76–79. (in Russian).
8. Chizhikova T.S., Dmitriyenko S.V., Klimova N.N. Rasprostranennost' zabolevaniy slizistoy obolochki polosti rta i gub u studentov Volgograda [The prevalence of diseases of the mucous membrane of the mouth and lips in students of Volgograd]. *Mezhdunarodnyy zhurnal prikladnykh i fundamental'nykh issledovaniy*, 2011, vol.6, pp.108–109. (in Russian).
9. World Cancer Report 2008. WHD, IARC. Lion, 2008.



ON THE QUESTION OF STUDYING PREDICATION IN THE ASPECT OF SPEECH ACTIVITY

Yuldashev A.U.

Yuldashev Aziz Uzgenovich - Lecturer, Department of Uzbek and Russian Languages, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi.

ABSTRACT

This article deals with the problems of the linguistic description of predication. It is argued that the linguistic description of Russian predication should be carried out in the aspect of a functional-communicative, in particular a pragmatic approach to the study of linguistic units, through the prism of the theory of speech activity.

KEYWORDS: predication, functional-communicative approach, pragmatics, speech act, speech activity.

DISCUSSION

Now it has become obvious that the traditional syntactic theory in its structural and structural-semantic direction does not provide a description and explanation of all aspects of the syntactic organization of the language. Paying great attention to the internal structure of syntactic units, it does not have the explanatory power of the use of syntactic constructions in speech. Therefore, there was an urgent need for a systematic description of the functioning of syntactic units, based on the results of such a field of linguistics as pragmatics.

Pragmatics, or communicative linguistics, provides materials for describing syntax at the level of studying predication in the aspect of speech activity.

The linguistic description of Russian predication should be only functional, it cannot be different, proceeding from the specifics of the object of description (predication is one of the three functions of linguistic expressions), which is important both in theoretical and applied aspects. At the same time, in the linguistic description, all aspects of the study of a sentence-statement are important: semantic structure, formal construction (in fact, structure), communicative function-predication,

and then nomination and location in their relationship.

The study of predication is inextricably linked with pragmatics, a pragmatic approach to sentence and utterance. At the same time, their functioning in speech, in speech communication and influence is studied. A pragmatic approach to the study of a sentence and a statement is determined by a set of questions. Attention is drawn to the addressee of speech, to the situation of communication, to the speaking subject and the addressee in their interaction in communication, in fact, to the relationship of predication.

In connection with the subject of speech, the explicit and hidden goals of the statement are studied: communication of information, opinion, order, request, question, advice, promise, apology, greeting, complaint; speech tactics and speech behavior; the rules of speech communication, adjusted by the goals and objectives of communication, highlighting the "maxim": quantity, quality, attitude, manner of speech; determination of the speaker's attitudes in the utterance; the speaker's reference, the speaker's assessment of the general fund of knowledge (presupposition), interests, opinions, psychological states, character traits, the ability to understand the



addressee; the speaker's attitude to what communicates the truth, falsity, the message of what is given the greatest importance in the statement.

In connection with the addressee of speech, the following are studied: interpretation of speech based on ideas about the speaking subject, the subject of speech; the impact of the utterance on the addressee: expanding the information content of the addressee, changes in the emotional state, views, assessments of the addressee, the impact on the actions performed by him, the aesthetic effect, types of speech response, on the stimulus of speech (for example, ways of avoiding a direct answer to a question, etc.).

In connection with the relationship between the participants in communication, the forms of verbal communication are studied (various forms of dialogue; friendly conversation, dispute, quarrel); socio-ethical side of communication (forms of address, communication style); the ratio between the participants in communication in speech acts (request, order).

In connection with the communication situation:

1) Interpretation of deictic signs (here, now, now, this one), as well as index components in the meanings of words: an indication of space with verbs like: come, come;

2) The influence of the speech situation on the topics and forms of communication (compare typical topics of conversation).

Pragmatic analysis of the utterance allows you to study speech within the framework of the theory of speech activity. Pragmatic attitudes towards speech constitute the content of communicative syntax. Pragmatics has vast areas of intersection in psycholinguistics and sociolinguistics, in the typology of speech and the theory of speech activity, the theory of communication and functional styles, the theory of text - discourse.

The approach to predication not only as a result, but also as a process has led researchers to the widespread use of such a term-concept as a speech act. A speech act is a purposeful speech action performed in accordance with the principles and rules of speech communication, speech behavior, and normative socio-speech behavior.

The main features of a speech act are intention (intention), purposefulness, conventionality. The speech act is always correlated with the speaker's face. The sequence of speech acts constitutes discourse, i.e. text. The speaker, the writer and the addressee participate in the speech act. Participants in a speech act have a common fund of speech skills - speech competence of knowledge and ideas about the

world.

To make a speech act means to relate to reality, to carry out speech, to give the speech purposefulness, to determine the communicative purpose of the utterance, to influence the consciousness or behavior of the addressee with the utterance, to create a new speech situation.

In a speech act, an act of utterance is distinguished, a propositional act that carries out reference and predication, an illocutionary act that implements the speaker's goal setting. Among speech acts, informative messages (representations) are distinguished; acts of motivation (directives, prescriptions), acts of acceptance of obligations (commissions), acts expressing an emotional state (expressives), acts - establishing (declarations, verdicts, operatives).

Consideration of speech activity is directly related to predication and speech acts. The concept of speech activity goes back to the psychological schools of L.S. Vygotsky and A.K. Leontiev. For our research, it is important to understand speech activity as a process consisting of a motive, purposefulness, heuristic in nature, having successive phases (orientation, planning, plan implementation, control).

With predication, and sometimes synonymy, the term "modality" is used. Modality is a functional-semantic category that expresses different types of relations between an utterance and reality, as well as different types of subjective qualifications of the communicated. Modality is a linguistic universal, the sphere of modality includes oppositions of statements by the nature of their communicative goal-setting (statement - question - motivation); gradation of meaning in the range: reality, unreality, different confidence of the speaker in the reliability of the message. The objective and subjective modality is contrasted.

Objective modality is a mandatory feature of any utterance, one of the categories that form a predicative unit - a sentence. Objective modality expresses the attitude of the communicated to reality in terms of reality and unreality. The main means of shaping the modality is the mood. Objective-modal meanings are organized into a system of oppositions and are revealed in the grammatical paradigm of sentences. Subjective modality is an optional feature of an utterance. The semantic basis of subjective modality is made up of understood assessments.

In the semantic (content) structure of utterances, a person's knowledge about the world is reflected and expressed: about information in the main event (situations, state of affairs), fixed in the life experience of speakers of a certain language, they are then reflected in the linguistic consciousness.



So, the process of interaction of the lexical and syntactic in the formation of an utterance reflects the acts of information transfer in the objective and subjective. Knowledge of the mechanism of interaction of the lexicon of syntax creates the prerequisites for a systematic description of synonymous series at the level of syntactic synonymy and is important for the implementation of learning goals in predication.

Attention to the formal construction of simple sentences - utterances prepares an indicative basis for the reproduction and generation of specific utterances. Such a description of the structure and semantics of sentences - utterances creates an opportunity to highlight those linguistic means through which the communicative intentions of the speaker are conveyed. The communicative intention is reflected in a certain goal setting and the actual emphasis of the components of the utterance.

Predicating the Russian utterance is based on the implementation of a functional-pragmatic approach to certain communicative varieties of interrogative, motivating and communicating (narrative) utterances. Their register list, taking into account the relationship and interdependence, determines the volume of the content of Russian utterances predicated in Russian oral and written speech, in monologue and dialogue.

In the communicative plan, the actualization of statements is considered. Deep linguistic research in the field of actual division, the allocation of syntagmas, phrasal and logical stress, the intonational-structural pattern of the utterance (intonation contour), the combination of various melodies, the variation of stress (phrasal, logical), the duration of interphrasal pauses and other issues are interpreted taking functional and pragmatic approach.

speech production. - M.: Nauka, 1991. -- 240 p.

REFERENCES

1. Denisova E.P. *Predication as a category of language and speech [Text] / E.P. Denisova // Synchrony and diachrony: modern paradigms and modern concepts: collection of articles. materials of the international youth scientific school. June 8-9, 2012. - Voronezh: Scientific book, 2012. - pp. 10-11.*
2. Denisova E.P. *Pragmatics of the predication act [Text] / E.P. Denisova // Bulletin of the Tver State University. - Series "Philology. - 2010. - No. 15. - Issue. 4 "Linguistics and Intercultural Communication". - p. 249-253.*
3. Manaenko G.N. *Predication, predicativity and proposition: the relationship of concepts // Actual problems of philology and pedagogical linguistics. - No. 13, 2011. - p. 138-143.*
4. *The human factor in language: Language and*



THEORETICAL BASIS OF TEACHING THE PEDAGOGICAL COMMUNICATION OF FUTURE TEACHERS OF THE ENGLISH LANGUAGE

Ibragimova F.H.

Ibragimova Feruza Holboyevna - senior teacher,

Doctor of Philosophy (PhD), Department of Intensive Teaching of Foreign Languages, Tashkent State Pedagogical University named after Nizami, Tashkent city, Republic of Uzbekistan

ABSTRACT

This article presents the theoretical foundations of teaching pedagogical communication for bachelor students of the pedagogical profile of the Institute of Foreign Languages. The article presents the features of pedagogical communication in a foreign language lesson, emphasizes its personal nature and the need to choose a communication style that ensures the implementation of the communicative orientation of education.

KEYWORDS: *communication, foreign language lesson, communication skills, professional competence.*

DISCUSSION

The successful implementation of the goals of teaching foreign languages in their modern understanding largely depends on the level of professional training of the teacher of a foreign language. The speech of the teacher of a foreign language plays an exceptional role in the classroom, and special attention should be paid to the work on the development of professional and communication skills (which are an integral part of professional competence) in the learning process at a language pedagogical university. Thanks to the teacher's ability to build and implement effective speech interaction in the classroom, the necessary conditions are created for the development and improvement of students' communicative skills by demonstrating the capabilities of the new language as an effective means of communication and preparation for real communication situations that take place outside the classroom [7]. The essence of pedagogical communication, the forms of its implementation in the lesson, the styles of pedagogical communication, difficulties in building mutual understanding and in establishing contact with the class and ways to overcome them, as well as the foreign language speech embodiment of these processes in a foreign language lesson, i.e. everything that makes up the substantive and procedural foundations of pedagogical communication should find a place in the process of professional training of future teachers

at the university, be worked out in situations that simulate communication in the lesson, undergo testing during industrial pedagogical practice.

The theoretical foundations of the methodology of teaching pedagogical communication in a foreign language lesson are laid within the framework of the basic disciplines for the methodology of teaching foreign languages - pedagogy and psychology. Communication itself, as a rule, is interpreted in psychology as a complex, multifaceted process of establishing and developing contacts between people, caused by the needs for joint activities and including the exchange of information, the development of a unified strategy of interaction, perception and understanding of the partner. However, communication in pedagogical activity has its own specifics, since here it becomes an instrument of a certain pedagogical influence and acquires a professionally significant character, and communication functions are endowed with an additional "load", since they develop from universal human aspects into professional and creative components.

According to V.A.Slastenin, pedagogical communication is "a multidimensional process of organization, establishment and development of communication, mutual understanding and interaction between teachers and students, generated by the goals and content of their joint activities" [6, p. 359]. Revealing the meaningful essence of pedagogical communication as interaction and



mutual understanding of two subjects of the educational process, this definition, however, does not reflect the most important of its aspects, namely mutual influence that communication can have on both the teacher and the student. Communication between a teacher and a student in a lesson is "a two-pronged process of interaction or mutual contact of subjects, in which there is an exchange of information, psychic reflection of each other and mutual influence on each other" [2, p. 15]. An equally important point noted by the Russian psycholinguist A.A. Leontyev, is the fact that the optimal communication between the teacher and students in the learning process has a rich potential, since it "creates the best conditions for the development of student motivation and the creative nature of educational activities, for the correct formation of the student's personality, provides a favorable emotional climate for learning, provides management of socio-psychological processes in the children's team and allows you to maximize the use of personal characteristics of the teacher in the educational process"[5].

Pedagogical communication in a foreign language lesson has a number of essential features that distinguish it from communication in the lessons of the native language, mathematics or history. Here it acquires a special linguodidactic meaning. Firstly, it is in a foreign language lesson that a complex of basic communication skills is often formed and developed for the first time: the ability to enter into communication, taking into account the situation, participants and the way of communication; the ability to maintain communication through verbal and non-verbal means; the ability to complete communication; the ability to take the initiative in communication; the ability to predict the result of your statement; the ability to evoke the desired verbal and non-verbal reactions of the interlocutors; the ability to build and implement a certain position in communication (set out, prove, compare, give examples, evaluate), etc. Obviously, the importance of these skills cannot be unfoundedly declared by a foreign language teacher. Foreign language communication skills should be demonstrated by the teacher in the process of his communication with students, because in accordance with modern goals in the field of teaching foreign languages, the entire educational process should be aimed at developing the ability to communicate in the target language. Adherence to the principle of communicativeness shared by all modern methodologists presupposes such an orientation of classes in which the goal of learning (mastering the language as a means of communication) and the means to achieve the goal (speech activity) act in close interaction. This involves solving real communication problems in the classroom in order to include students in

communication in the target language, and a foreign language lesson is replete with situations of both real and conventional speech nature. From what has been said follows the second essential feature of communication in a foreign language lesson. It cannot only have a role character, in which traditionally communicants realize themselves only in a limited set of role characteristics, acting as representatives of certain groups of people, because the roles of "teacher" and "student" are asymmetric in nature. The implementation of exclusively role-based communication in the lesson is not able to provide the necessary mutual interest and need for communication, the motive for communication, the full implementation of the functions of verbal communication. For a foreign language lesson, personal communication is also necessary, in which its participants act as individuals with their inherent knowledge, experience, feelings, interests, views, worldview. Only in this case it will be possible to talk about learning on a communicative basis, in which pedagogical communication will not be an impact, but an interaction that has various forms of speech embodiment.

In the psychological and pedagogical literature, one can find a wide range of opinions on the style of pedagogical activity and pedagogical leadership, understood as "a set of stable ways of interaction between a teacher and students in the process of joint communication activities" [4, p. 237]. The first and most famous classification, created back in 1938 by K. Levin, describes authoritarian, democratic and permissive communication styles. The study of V.A. Kan-Kalik gives such communication styles as communication based on enthusiasm for joint creative activity, communication based on friendly disposition, communication-distance, communication-intimidation, communication-flirting [3, p.97-100]. V.A. KanKalik and G.A. Kovalev developed a typology of styles, which is based on the three-component structure of communication by V.N. Myasishchev:

- 1) Reflection (simple - complex);
- 2) Relationships (personal - role);
- 3) Circulation (open - closed).

As a result of the ratio of these components, the following styles of pedagogical communication were identified: dialogical, confidential, reflexive, altruistic, manipulative, pseudo-dialogic, conformal, monologic. S.L. Bratchenko, when analyzing the style of pedagogical communication, uses the concept of "directionality in communication". He described six styles (dialogical, authoritarian, manipulative, alterocentric, conformal and indifferent), which are manifested in both interpersonal and professional communication [1]. All the above classifications are accompanied by a



detailed description of each of the communication styles in the lesson. Nevertheless, they are all a kind of theoretical abstractions, because in practice we are dealing with a mixture of styles. A teacher, demonstrating in general adherence to one style, for various reasons, cannot completely abandon elements of another (for example, a general orientation towards a democratic style, in some situations, the use of some authoritarian techniques).

Which of the styles above classifications is the most optimal for a foreign language lesson? Generally, we can say that this is a democratic style, in which the teacher takes into account the individual characteristics and abilities of students, welcomes their activity and independence, carefully treats their opinion when organizing work and discussing it, which contributes to the growth of sociability and trust in the relationship between teacher and students. An indicator of high professionalism is communication based on passion for joint creative activities. According to the classification of V.A.Kan-Kalik dialogical style of communication seems to be the most acceptable, since it has the maximum developmental, educational and creative potential. Dialogic orientation in communication according to S.L.Bratchenko is characterized by an orientation towards equal communication based on mutual respect and trust, mutual understanding, mutual openness and communicative cooperation, the desire for mutual self-expression, development, cooperation, and therefore can be considered the most suitable. The dominance of these particular styles in the teacher's pedagogical communication style can ensure a positive attitude of students in a foreign language lesson, increase their degree of activity and involvement, support or stimulate the desire to communicate, and also create conditions under which students can develop their communicative speech skills.

Thus, it can be stated with confidence that a properly constructed personal communication between a teacher and a student is able to provide a communicative orientation of education, establish the necessary contact, help overcome the psychological barrier, transfer the teacher and students into subject-subject relations of equal productive cooperation. This requires the teacher to make a conscious choice of the correct style of pedagogical communication, taking into account his subjective personal qualities, specific learning conditions, and awareness of his role in this process.

REFERENCE

1. Bratchenko S.L. *Interpersonal dialogue and its main attributes // Psychology with a human face: a humanistic perspective in post-Soviet psychology / ed. D. A. Leontyeva, V. G. Shchur. - M.: Smysl, 1997. - p. 201–222.*
2. Goryanina V.A. *Psychology of communication. - M.: Academy, 2002. -- 416 p.*
3. Kan-Kalik V.A., Kovalev G.A. *Pedagogical communication as a subject of theoretical and applied research // Questions of psychology.- 1985.-№4.- P.9-16.*
4. Krasilo A.I. *Reader on educational psychology. - M.: International Pedagogical Academy, 1995. - 412 p.*
5. Leontiev A.A. *Pedagogical communication, Moscow: Education, 1979, 248 p.*
6. Slastenin V. A. *Pedagogy. - M.: Academy, 2004. - 468 p.*
7. Yakovleva Yu.M. *The student's speech activity in a foreign language lesson and the possibility of its intensification // Scientific Review: Humanitarian Research. - 2016. - No. 12. - p. 93-97.*



MAIN PROBLEMS OF MODERN TEXT LINGUISTICS

Shika Nelya Nikolaevna¹, Mullabayeva Lola Shaniyazovna²

¹*Candidate of Philology, Associate Professor, Head of the Department of Russian Linguistics of the Faculty of Foreign Philology of the National University of Uzbekistan named after Mirzo Ulugbek*

²*Lecturer at the Department of Russian Linguistics, Faculty of Foreign Philology, National University Of Uzbekistan named after Mirza Ulugbek.*

SUMMARY

This article discusses issues related to the study of the text by linguistic scientists. The author of the article notes that the main indicators of the existence of a coherent speech can serve as such signs as completeness, independence, coherence and analysis of some areas of modern linguistics of the text shows that the main role in the organization of coherence is played by the logical structure of the text.

KEY WORDS: *linguistics, language and speech, text problem, linguistic structure, logical analysis, stylistics.*

ОСНОВНЫЕ ПРОБЛЕМЫ СОВРЕМЕННОЙ ЛИНГВИСТИКИ ТЕКСТА

Щитка Неля Николаевна,

Кандидат филологических наук, доцент, заведующая кафедрой русского языкознания факультета зарубежной филологии Национального университета Узбекистана имени Мирзо Улугбека

Муллабаева Лола Шаниязовна-

Преподаватель кафедры Русского языкознания факультета зарубежной филологии Национального университета Узбекистана имени Мирза Улугбека.

Аннотация

В данной статье рассматриваются вопросы, связанные с исследованием текста учеными-лингвистами. Автор статьи отмечает, что, основными показателями существования связной речи могут служить такие признаки, как законченность, самостоятельность, связность и анализ некоторых направлений современной лингвистики текста показывает, что основную роль в организации связности играют логическая структура текста.

Ключевые слова: *лингвистика, язык и речь, проблема текста, языковая структура, логический анализ, стилистика.*



Текст вообще не существует сам по себе, он неизбежно включается в какой-либо (исторически реальный или условный) контекст. Текст существует как контрагент внетекстовых структурных элементов, связан с ними как два члена оппозиции. Положение это нам станет более ясно, если мы определим понятие «приём», «художественное средство».

В самом общем виде в лингвистической теории текста сейчас обнаруживается два направления: первое исходит из монистического понимания языка, второе - из различения языка и речи. Согласно монистическому подходу, язык остается единым по своей природе, имеющим одну цель - установление взаимопонимания в процессе коммуникации. Коммуникативная функция рассматривается как единая интегрирующая функция. Изучение ее помогает осветить наиболее важные свойства механизма языка. Текст, таким образом, репрезентирует язык как средство общения, он является полноценной единицей языка.

Текст является знаком определённого содержания, которое в своей индивидуальности связано с индивидуальностью данного текста. В этом смысле существует глубокое различие между лингвистическим и литературоведческим пониманием текста. Языковой текст допускает разные выражения для одного и того же содержания. Он переводим и в принципе безразличен к формам записи (звуковая, буквенная, телеграфными знаками и т. д.). Текст литературного произведения в принципе индивидуален. Он создаётся для данного содержания и, в силу отмеченной выше специфики отношения содержания к выражению в художественном тексте, не может быть заменён никаким адэкватом в плане выражения без изменения плана содержания. Связь содержания и выражения в художественном тексте настолько прочна, что перевод в другую систему записи, по сути дела, также безразличен для содержания. Языковой текст может быть выражен в фонемах, графемах любой системы, и сущность его от этого не меняется. Мы воспринимаем графически закреплённый текст без предварительного перевода в фонологические единицы. Система записи художественного текста ближе к соответствующим отношениям в музыке. Текст должен быть переведён в звуки, а потом воспринят. То, что при большом навыке чтения стихов среднее звено может выпадать, подобно чтению нот глазами у опытного музыканта, – дела не меняет. Именно в литературном произведении слово «текст» оправдывает свою этимологию

(«tex-tum» от «texto» – сотканный, сплетенный). Ибо всё богатство оппозиций плана выражения, становясь дифференцирующими признаками плана содержания, придаёт тексту и необычайную смысловую глубину, и индивидуальность, не сводимую к механической сумме всех отдельно извлечённых из плана содержания мыслей.

Понятие текста Текст и внетекстовые структуры Определение понятия «текст» затруднительно. Прежде всего, приходится возражать против отождествления «текста» с представлением о целостности художественного произведения. Весьма распространенное противопоставление

Определяя характерные признаки текста, необходимо подчеркнуть, что текст как факт речевого акта системен и представляет собой завершенное сообщение, литературно обработанное в соответствии с требованиями данного функционального стиля, имеющее сверхфразовые единицы, разные типы связи, целенаправленность и прагматическую установку.

В зарубежной лингвистике проблема текста решается с разных позиций. Исследуется, например, условия правильной коммуникации, условия возникновения многозначности и прагматика, контекстные отношения между предложениями, соотношения языковой структуры, языковой системы и общественной значимости.

Вторая группа проблем связана с вопросами лингвостилистики. Это вопросы разграничения эмпирического и абстрактнотеоретического в определении статуса стилистики как науки.

Третья группа проблем связана с изучением вопросов коммуникативной грамматики или коммуникативной теории языка.

Четвертая группа проблем связана с прагматикой, то есть с изучением поведения знаков в реальных процессах коммуникации.

В пятую группу можно выделить исследования, посвященные теории речевых актов.

К шестой группе можно отнести работы, посвященные логическому анализу естественного языка.

Существование разных теоретических подходов к изучению текста приводит и к различным его определениям. Однако в общем определении текста можно констатировать, что текст - это произведение речетворческого процесса, обладающее завершенностью,



раскрывающее определенную тему, основную мысль или то и другое вместе и состоящее из ряда особых (текстовых) единиц, объединенных разными типами лексико-грамматической, структурно-смысловой, логической, стилистической связи, имеющее определенную целенаправленность и прагматическую установку. В этом определении выделяют онтологические и функциональные признаки текста, проводится разграничение признаков устной - спонтанной и неорганизованной речи от признаков письменной речи, строго регламентированной в употреблении своих средств.

На протяжении многих лет в языкознании выделялись две основные единицы текста - предложение и сам текст. Затем было доказано существование единиц промежуточных, существующих между отдельным предложением и текстом. Однако до сих пор лингвисты не пришли к единому мнению относительно статуса этих единиц. В последнее время наибольшее распространение в методике преподавания русского языка получил термин «сложное синтаксическое целое» (ССЦ). В специальных психологических исследованиях была доказана релевантность синтаксического целого для процесса восприятия и запоминания текста.

В качестве критериев объединения предложений в ССЦ используются три отношения: отношения между членами парцелированной структуры; отношения между соседними предложениями, одно из которых является полным, другое - неполным; отношения между соседними предложениями, второе из которых уточняет содержание первого при помощи специальных слов (кроме того, к тому же и так далее). При помощи таких слов рассматриваются смысловые отношения между частями высказывания: последовательность в рассуждении, доказательстве; единство или близость субъекта, или места действия, временная соотнесенность, причинно-следственные и условно-следственные отношения, дополнение и уточнение; иллюстрация, выделение частного случая, пояснение; сопоставление и противопоставление; общение, выводы, итог предыдущей информации.

В последнее время в работах лингвистов подчеркивается сложность системных промежуточных единиц, неоднозначность выделения их в процессе восприятия текста.

Особое место в лингвистике текста занимает абзац. В отличие от границ ССЦ, абзац всегда обозначен в тексте «красными строками». Результаты специальных экспериментальных исследований показывают, что выделение абзаца

может иногда зависеть от чисто количественных характеристик человеческого восприятия. Это подтверждается и исследованиями интонационной структуры текста устной речи. В большинстве же случаев расстановка абзацев согласуется с внутренней структурой текста, то есть является мотивированной. Тенденция мотивированного выделения абзацев наблюдается в текстах современной прозаической (особенно научной) литературы.

В исследованиях, посвященных изучению членения текста в устной речи, было установлено, что пауза, как и красная строка, может расходиться с внутренней структурой текста. Однако части, на которые делится текст, регулярно оформляются в виде «фонетических абзацев». Поэтому в одном и том же тексте абзацное и «собственно-фонетическое» членение могут находиться в разных соотношениях.

В настоящее время под термином «абзац» понимают или абзацный отступ, или отрезок текста между двумя отступами. Смешивать в учебной практике абзац и ССЦ, мы считаем неправомерным, так как здесь происходит смешение тематического и смыслового планов выражения мысли.

Отрезок текста, состоящий из нескольких абзацев или сложных синтаксических целых, называют фрагментом. Однако в практике обучения этот термин используется редко.

Важное место в лингвистике текста занимают исследования процессов построения высказывания, лингвистических процедур обнаружения и представления структур целого текста.

Таким образом, если в построении текста важную роль играют механизмы связной речи, то в процедурах его обнаружения - закономерности логического порядка. К таким закономерностям можно отнести различные соотношения текстовых суждений, содержащих тематические субъекты и предикаты-поясняемое и пояснение, объясняемое и объяснение, доказываемое и доказательство и тому подобное.

Анализ некоторых направлений современной лингвистики текста показывает, что основную роль в организации связности играют логическая структура текста.

К категориям текста относят свойства ретроспекции и проспекции, свойства пространственно-временного континуума, модальности и так далее. Большинство исследователей выделяет три категории: цельность, связность, информативность. Однако определенного представления о том, что такое цельность и связность до сих пор нет. Категория цельности



обычно связывается с глубинной структурой текста. Связность выступает как проявление поверхностной структуры текста, то есть как проявление состава и взаимодействия единиц разных уровней текста.

Особо следует затронуть вопрос о модальности текста. Рассмотрение этой категории связано с определением коммуникативной установки текста. Как известно, модальность проявляется в авторских оценках, сентенциях. Для нас представляют интерес те авторские сентенции, которые могут выступать в аспекте текстообразования. К ним относят:

- оценку «пригодности» языкового средства для выполнения ситуативного задания (оценку его коммуникативной гибкости и приспособляемости);

- выражение содержательно-концептуальной текстовой оценки;

- речевую оценку как основу создания текстовых импликаций;

- речевую оценку, выступающую в качестве элемента языковой игры или мотива отказа от участия в ней;

- сюжетобразующую функцию речевых оценок, возникающую на базе вызываемых слов многообразных ассоциаций.

Таким образом, связная речь - это не только совокупность предложений, логически, грамматически, и стилистически организованных для передачи законченного смысла, но и структурное единство языковых средств, организуемое для реализации законченного смыслового единства. Основными показателями существования связной речи могут служить такие признаки, как законченность, самостоятельность, связность. Поэтому развитие речи - это не только обучение умению пользоваться языковыми средствами в соответствии с преподаваемым содержанием, но и процесс овладения структурой текста в целях наилучшего и более полного использования его языковых ресурсов.

Литература

1. **Жинкин Н.И.** *Язык - речь - творчество: Избранные труды /Н.И.Жинкин . -М.: Лабиринт, 1998.*
2. **Кожина М.Н.** *Стилистика русского языка /М.Н.Кожина. - М., 2004.*
3. **Лосева Л.М.** *Как строится текст /Л.М.Лосева. - М., 2004.*
4. *Методика развития речи на уроках русского языка. /Под ред. Т.А.Ладыженской. - М., 2000.*
5. **Солганик Г.Я.** *Стилистика русского языка. /Под ред. Н.М.Шанского. - М., 2000.*
6. **Пешиковский А.М.** *Вопросы методики родного языка, лингвистики и стилистики /А.М.Пешиковский. - М., 1930.*



PEDAGOGICAL MOTIVATION IN FOREIGN LANGUAGE LEARNING, GENERAL AND INDIVIDUAL MOTIVATION

Azizova Gulnoza Ganijanovna

Samarkand State Institute of Foreign Languages, Doctor of Philosophy.

ANNOTATION

This article is about the peculiarities of the formation of pedagogical motivation, general and personal motivation in the study of a foreign language.

KEYWORDS: *scientific, pedagogical, educational, innovation, development, message, communication, foreign language, personal, motivation, method, activity, attitude.*

Аннотации: Статья об особенностях формирования мотивации, общей и личностной мотивации при изучении иностранного языка.

Annotatsiya: Ushbu maqola xorijiy tilni o'rganishda pedagogik motivatsiya, umumiy va shaxsiy motivatsiyashakllantirishning o'ziga xos xususiyatlari to'g'risida.

The time itself appoints modern specialists in a foreign language of any specialization that is not linguistic. "Knowing at least one foreign language at its level is not social and professional communication, the ability to change specific vocabulary and professional terminology." The standard requirements are that the specialist must understand not only what is written, but also speak and write and speak effectively the level of movement in a foreign language communication that implies ability is much higher in language, speech, and non-linguistic preparation.

Modern study of social problems has a general cultural significance, general professional and narrow professional competencies. Although it is important to know foreign languages, it is not enough for students to master it. In addition, the level of their efforts does not meet the requirements for mastering a foreign language in churches. Using academic terminology, we construct a formula as a low level of student motivation. The problem of this work is for masters to learn a foreign language .. The process of mastering assimilation in a foreign language in the artificial environment of the classroom has a number of features and difficulties. The unequal response is that taking students to academic activities has a different "personal

meaning" to them in terms of teaching. In any case, students are encouraged to learn based on certain things other motives or systems of motives that differ in importance. The problem of a sufficient level of student activity is the object of this research - the basis for determining the motives of mastering the foreign language of master engineers. In the list of difficulties that hinder the study of foreign languages by masters of the department of interdepartmental base language "Applied Naya Physics and Space Technology" Siberian Federal University, the problem of motivation in the first place. Not all students know why they need to learn a foreign language. The curriculum does not include a motivational block. The materials and skills learned do not always match the expected results and are the practical competencies required by the students. Therefore, we consider it necessary to organize a foreign language course. language based on the study of students' requirements. We learn foreign language practical skills and areas, things that students find important and necessary for themselves. Future masters are professional engineers. Parties with one, they are eager to learn, formed ideas about their professional future, formed learning inquiries. On the other hand, every non-foreign language student is increasingly overwhelmed by external



motives such as smoke, such as "diploma education" internal motives, such as "use the acquired knowledge in future work" and "in the right situation, use the acquired knowledge" [6]. However, the analysis of the works shows that their authors are investigating that the motives of students of various non-linguistic educational institutions are motivated to learn a foreign language, the range of students turns out to be much more "blurred". Shvalovoy GV A public opinion poll was conducted on the issue

According to students, the objectives of learning a foreign language are: activity for use in the professional field communication with people of different nationalities, for general cultural education. Learning motives are well known to foreign language students, evaluate each of the options offered high enough, but choose in favor of career-related motives. In assessing their status in the process of studying abroad, the opinion of students was divided into two: I like learning a foreign language, learn with great pleasure -, but of students They complained about not being able to learn a foreign language. Melexina E.A. and Onal IO, studying the motivation of students, medical and technical universities have concluded that the motivations of medical students to study at the university are the motivations of technological universities: career-oriented, cognitive and prestigious-utilitarian, the first of which is broad social can be described as external, and the latter in a narrow range. The desire to "deepen" and "solid knowledge" is related to the content of educational activities and therefore it is considered an internal motivation. That is, respondents are motivated students to study in general, there is an external or external advantage. relatively unanimity in the answers of students. Studying the direction of motivation to learn a foreign language strange language generally confirmed a low assumption related to the level of internal development i.e. educational activities. Students believe that a good knowledge of English helps Competitiveness in applying for a job on a personal computer and provides employment; making it easier to travel abroad; contributes to the improvement of general and specialized knowledge; comprehension of lyrics; acquisition of new knowledge; development of memory and thinking; barriers to participation in international conferences communication with native speakers and dealing with them business and personal correspondence; the ideas of important people and being in step with their peers that allow them to meet the requirements [8]. Empirical studies with language masters were conducted to study the specific features of foreign learning motives.

In second place are knowledge and career opportunities. Thus, the main advantage of most students is the ability to communicate with knowledge of a foreign language native speakers. This explains the truth primarily by the importance of learning tasks, they give an idea about foreign speech and the ability to speak a foreign language communicative. In turn, the ability to communicate in the native language, the ability to avoid the language and travel around the world, create problems, which, in their opinion, is another key thing to learn a foreign language the result of content analysis. The purpose of the use of foreign language knowledge in a professional language the ability to read scientific literature, students put in the second place, in the third place the opportunity to go abroad to a permanent place of residence, and then - the fourth and fifth places - the acquisition of knowledge self-development, self-esteem and career opportunities. Let's compare our foreign language learning motives, professional interests come first, communication with representatives of different nationalities comes second, and third is general cultural training. Graduate students, in contrast to graduate students, are interested in the professional interests of countries (reading scientific literature in the original) in the second place, in the first place they are - communication and then - perception and self-development. This difference can be explained by the fact that SibFU masters have already decided to choose a profession. each has its own workplace. After studying for a master's degree, they improve in their chosen professions. Therefore, they are interested in several more issues - this opportunity is personal and professional - expand your horizons, learn by working with representatives of other countries and nationalities, working and living conditions abroad. Therefore, comments with a different culture of clear understanding and speaking a foreign language in order to know the desire free. And for them, this direction is a priority. In the profession they took place, but anyway, they deliberately put professional interests second: they were engaged in professional activities, they came to participate in international conferences and meetings, read and publish scientific articles to know a foreign language they lack for free. To us the classification of motives is divided into sub- external and internal. It is difficult to characterize, for example, the motive "Treasures of the ability to make purchases on the Internet." Which category - external or internal reasons - can be associated with this? internal motives. The ability to identify the type of more problematic cognitive motive, language of interest. On the one hand, it is an internal motive. On the other hand, without providing the applicable value, it



can remain declarative, formally applied by the student and ta' no secret really with his efforts in language learning. According to the results of empirical research we formulate globalized practical typology of motives in the study of foreign languages by students of non-linguistic specialties: The field of application professional, communicative, personal growth and application. Intended to use: effective and declarative, where actions define and The declaratory are effectively used by the subject in connection with the actual behavior. The only model of motives for learning a foreign language for a student There are currently no non-linguistic universities out there.

Analysis of motives for the study of foreign languages for interdisciplinary masters Call of the Department of "Applied Physics and Space Technology" Siberian Federal University shows that the specifics of their professional activities and future activities are promising, primarily communicative motive, the second - professional reading scientific literature, the third - the opportunity to live and work abroad and four - this, the growth of self-esteem and opportunities career growth. Based on the content of the motives of graduate students, we have formed conclusions about the organization of the process of studying abroad in a strange language. Table 4 shows the forms of working with a student with depths with different motives. Type Cause Communication Professional Personal growth is applied Effective Communication active sub- action Business and role-playing games Discussions Existence of tasks Really professional actions - translation, written texts Compatibility Assignments of interest to the artist and valuable student, design costs Denmark Application software Denmark - buy flights foreign language website, booked dormitory hotel declaration- hard Game play games Read and re-read professional waters natural texts Compatibility for dissertation assignments drawings and valuable student Practical tasks Thus, for students whose main motive is communication, the most effective form of teaching is interactive interaction of teaching methods, including communicative learning technologies - discussions, o' yins, dramatization, development The most common simulated communication situations tear options for relationships in real conditions. All this helps He wants to solve the problem of communication with native speakers. In the process of demonstrating different communication situations, one learns linguistic expressions along with the situation (gesture) (i.e., functionally meaningful behaviors). In a given situation, the student unconsciously masters the language system. In addition, the methodology of communicative teaching techniques involves the creation of

information fields - an atmosphere that is impossible without the benevolent gang, because a stressful situation blocks a person's consciousness and, accordingly, blocks the acquisition of language. The choice of communication and language topics is made on the basis of the material, its communicative value, style, relevance to the life experience and interests of students.

REFERENCES

1. *Ўзбекистон Республикасининг "Таълим тўғрисида"ги Қонуни // "Баркамол авлод – Ўзбекистон тараққиётининг пойдевори" китобида. – Т.: Шарқ, 1997. – Б. 20-29.*
2. *Мирзиёев Ш.М. Ўзбекистон Президентини Шавкат Мирзиёевнинг БМТ Бош Ассамблеяси 72-сессиясида сўзлаган нутқи // "Халқ сўзи", 20 сентябрь, 2017 й.*
3. *Мирзиёев Ш.М. "Қонун устуворлиги ва инсон манфаатларини таъминлаш – юрт тараққиёти ва халқ фаровонлиги гарови" мавзусидаги Ўзбекистон Республикаси Конституцияси қабул қилинганнинг 24 йиллигига бағишланган тантанали маросимдаги маърузаси. – Т.: Ўзбекистон, 2017. – 48 б.*
4. *Абдуазизов А.А. Матн когнитив фаолият маҳсули // Til taraqqiyotining qonuniyatlari. – Samarqand: SamDCTI, 2009. – 23 б.*
5. *Раҳматуллаев Ш. Ўзбек фразеологиясининг баъзи масалалари. – Тошкент: Фан, 1966. – 20 б.*
6. *Авдеева О.И. Всероссийская научная конференция «Фразеология на рубеже веков: достижения, проблемы, перспективы» // Филологические науки. – М., 2000. - №5. – С. 122-125.*
7. *Алехина А.И. Исследование системной организации фразеологии современного английского языка (Проблема фразеологических отношений и фразеологических структур): Автореф. дисс.... д-ра филол. наук. – Л.: ЛГУ, 1986. – 37 с.*
8. *Алфиренко Н.Ф. Спорные вопросы семантики. – М.: Гнозис, 2005. – С.5-6.*
9. *Амосова Н.Н. Основы английской фразеологии. – Л.: ЛГУ, 1963. – 208 с.*
10. *Арнольд И.В. Семантика. Стилистика. Интертекстуальность. – СПб.: Изд-во С.Петербург ун-та, 1999. – 444 с.*
11. *Арнольд И. В. Лексикология современного английского языка. – М.: Издательство литературы на иностранных языках, 1959. – 351 с.*
12. *Арсеньтева Е.Ф. Фразеология и фразеография в сопоставительном аспекте. – Казань: Казань гос.ун-т, 2006. – 172с.*
13. *Арутюнова Н.Д. Язык и мир человека. – М.: Языки русской культуры, 1998. – 89 с*



14. Бархударов Л. С. *Язык и перевод. Вопросы общей и частной теории перевода* – Москва: ЛКИ, 2010. – 169 с
15. Бодуен де Куртене *Избранные труды по общему языкознанию*. – М.: Наука, 1963. – 324 с
16. Бурдин Л.С. *Состав лексики с «предупредительными» пометами в толковом словаре английского языка малого типа*. // *Вопросы лингвистики и методики преподавания иностранных языков*. – М.: Изд. МГУ, 1996. – 558.
17. Вартаньян Э.А. *Из жизни слов*. – М.: Детгиз, 2002. – 240 с.
18. . Верецагин А.М. *Язык и культура. Лингвострановедение и преподавание русского и иностранных языков*. М., 1990.
19. Маркова А.К., Матис Т.А., Орлов А.Б. *Формирование мотивации учения*. М., 1990.
20. Пассов Е.И. *Коммуникативное иноязычное образование: концепция развития индивидуальности в диалоге культур*. Липецк: Изд-во ЛГПИ, 1999.
21. Сафонова В.В. *Изучение языков международного общения в контексте диалога культур и цивилизаций*. Воронеж, 1996.
22. Ерошкина Е.В. *Категория художественного символа в русском литературоведении XX века: автореф. дис.канд. филол. Наук* – М.: ЛКИ, 1996. – 162 с.
23. Зельцер Л.З. *Выразительный мир художественного произведения*. Москва: Некоммерческая издательская группа Э. Ракитской “Эра”, 2001. – 467 с.
24. Каушанская В.А. и другие *A Grammar of the English language* – М.: Prosveshenie. Leningrad, 1967. – 522 с.
25. Комиссаров В.Н. *Теория перевода (лингвистические аспекты)* – М.: ЛКИ, 1990, – 190 с.
26. Левцкая Т.Р. Фитерман А.М. *Теория и практика перевода с английского языка на русский*. – М.: Наука, 1963. –123 с.
27. Лесных Е.В. *Отражение истории народа в слове// Материалы по славянской письменности и культуре. Выпуск XIX*. – М.: Липецк, 2001. – 273с.
28. Лесных Е.В. *Процессы архаизации экономической лексики русского в 20-30-е гг. XX в, Исследования до русскому и общему языкознанию*. –М.: Липецк, 2000. – 388 с.
29. Лукьянова Н.А. *Экспрессивная лексика разговорного употребления*. –Новосибирск: Наука, 2006. –344 с.
30. Маковский М.М. *Взаимодействие ареальных вариантов «сленга» и их соотношение с языковым стандартом*. // *Вопросы языкознания*. М.: МГУ, 1993. –240 с.
31. Маковский М.М. *Языковая сущность современного английского «сленга»*. – М.: *Иностранные языки в школе*, 1992.–185с.
32. Мелёхина Е.А., Онал И.О. *Особенности мотивации студентов не-языковых вузов к изучению иностранного языка (на примере меди-цинского и технического университетов)* // *Преподаватель высшей школы в XXI веке: Труды*. 2007. С. 231–240.
33. Швалова Г.В. *Формирование мотивации студентов технического вуза при изучении профессионального иностранного языка* // *Концепт*. 2012. № 11 (ноябрь). URL: <http://www.covenok.ru/koncept/2012/12152.htm>
34. Хамедова Г.Н. *Исследование мотивации изучения иностранного языка у студентов неязыковых специальностей* // *Вестник ЧГПУ*. 2011, №3. С. 184–192.
35. Онал И.О. *К вопросу о мотивации студентов неязыковых вузов к изучению иностранных языков* // *Сибирский педагогический журнал*. Новосибирск: Изд-во ООО «Немо-Пресс». 2007. № 12. С. 131–140.
36. Кушнарёва Т.И. *Интересно ли студентам неязыкового вуза изучать иностранный язык?* // *Казанский педагогический журнал*. Казань, 2016. № 4 (117). С. 115–118.
37. Михайлина О.А. *Некоторые вопросы коммуникативного подхода в преподавании иностранных языков* // *Вестник Краснодарского уни-верситета МВД России*. 2013. №4 (22). С. 131–132.
38. Штыхина К.С. *Специфика обучения иностранному языку как сред-ству межкультурного общения студентов неязыковых специальностей* // *Записки Горного института*. 2008. Т. 175. С. 123–124.
39. <http://www.eua.be/eua/jsp/en/upload/>



TREND OF GROWTH AND PRODUCTIVITY OF HORTICULTURAL PRODUCTS IN INDIA AND ODISHA

Smruti Rekha Basa¹, Dr. Kabita Kumari Sahu²

¹PhD Research Scholar in Economics, MSCB University, Baripada, Mayurbhanj, Odisha

²Assistant Professor of Economics, MSCB University, Baripada, Mayurbhanj, Odisha

Article DOI: <https://doi.org/10.36713/epra6948>

DOI No: 10.36713/epra6948

ABSTRACT

The objective of the study is to analyse the trend, growth and productivity of horticulture crops in India and Odisha. The study is based on secondary data. It is observed that the factors like market scenario, export promotion, suitable climatic condition, and storage facility to avoid damage risk of crops are very crucial. There are lots of factors that affect the growth trend of different horticulture crops. The overall trend is fluctuating over the years. All the crops those are taken in to consideration for the study are in declining trend. There is a need of effective approach to enlarge horticulture sector. The factors like irrigation facility, market condition of the horticultural products, promotion of the crops, storage facility of the crops, training of the farmers and environmental factors such as climate and geographical characteristics such as quality of soil and ground water table influence the horticulture practices as well as other agriculture productivity and export of the products. Moreover, awareness, skill and quality control strategies depreciate the turnover and so as the farmers in India.

KEY WORDS: Area, Crop, Growth, Horticulture, Productivity

I. INTRODUCTION

India is a land with varied soil and climatology comprising diverse agro-climatic regions provides huge opportunity to grow a huge variety of horticulture crops. These huge variety of crops from a substantial part of total agricultural produce in the country including fruits, vegetables, flowers, tuber crops, roots, ornamental plants, medicinal and aromatic plants, spices, plantation crops, mushrooms and condiments. According to the history of horticulture science horticulture development had not been precedence until recent years. During the 80's the main emphasis was on cereals. But in 90's the developing of horticulture was started. The institutional support and planned process for the development of horticulture had started. Later the post 1993 period more attention was given on the development of horticulture through the efficient

allocation of the plan and knowledge-based techniques (KBT).

Though horticulture practices were started earlier period of time (Srinivasan, 1961) but after launching National Horticulture Mission (NHM) in April 2005 the promotion of horticulture have been started by implementing different strategies. The role of Foreign trade policy in 2004-09 is also important to enhance the agricultural exports, growth and promotion of horticultural yields (ICAR Report, 2010). The horticulture sector started growing at an average of 3.6 percent after launching the NHM in 2005 (ICAR Report, 2010) during the period of 2001-02 to 2009-10.

II. OBJECTIVES

The main objective of this paper is to show the trend of growth of area and production of horticulture crops in India and Odisha. The study also



focusses on inter-crop and inter-state comparison of growth of horticultural production.

III. DATA AND METHODOLOGY

The present study is based on secondary data. The Secondary data are collected from published sources of Horticulture Division, Department of Agriculture & Cooperation, Ministry of Agriculture & Farmers Welfare, Govt of India, Reports of National Horticulture Board, The Directorate of Horticulture, Bhubaneswar, Odisha, Reserve Bank database, and Food Statistics. The growth trend has been analysed with the help of graphical method.

IV. LITERATURE REVIEW

To understand the growth and productivity as well as the factors that affect horticulture production past literatures have been extensively swotted. According to **Patel (2005)** the importance and scope of under explored horticultural crops having lot of potential to grow with less maintenance in North Eastern region, the underutilizing horticulture crop are blessed with many merits and easily tolerate the adverse climate condition, soil structure. According to **George et al. (2010)** through diversification of crops small and marginal coconut grower improving their food and nutritional security. Suitable intercrop like vegetables, plantation, crops and tubers are major success factors, it accelerated the horticulture growth as well as improve the purchasing power per people. **Sati (2018)** trying to focus the progress in horticultural farming and undergoing used pattern of cultivation in rural area of Uttarakhand. A huge range of horticultural crops grown in Uttarakhand. **Vishnu et al. (2014)** argued that recently people are diversified towards horticulture rather than cereal farming. This has been revealed in the different areas of Karnataka. Most of the diversified areas under dry agro climatic zone, the growth rate also high in horticulture crop cultivation whereas less diversified area got less growth rate. The benefit and barriers of organic fertilizer which are the waste product from horticulture itself. As per the study more than 90% of manners were applied directly to the land. **Nabi and Bagalkoti (2017)** have identified that the change of customers habit, more employment opportunity, modern technology, urbanization push the farmers towards the horticulture practices in the rural areas. Also, storage facility, use of waste lands can boost the growth rate more. As argued by **Kamei (2013)** despite having basic transport facility connecting to nearby big cities and huge range of land having potentiality for growing other kind of horticultural crops still it comes under the negligence of the policy

makers. According to **Pathak et al., (2019)** there is a massive diversion seen from the traditional agriculture to the horticultural sector in Madhya Pradesh. The farmers are experiencing the crop damage by irregularity of rain. According to **Patra (2014)** by making district wise analysis the author has outlined that the district like, Mayurbhanj, Keonjhar, Sundargarh districts have achieved unceasing achievements while rest of the districts are lacking behind except Khordha, Raygada, Koraput, Nabarangapur, Malkangiri and Boudha which are on the way of progress. This would be due to the both regional and agro-climatic inconsistencies.

Singh (2009) has outlined the scenario and influences of export of horticulture products by encompassing a wide range of crops such as fruits, vegetables, tuber, medicinal, aromatic, spices, plantation with diversification of environmental factors. **Birthal et al., (2008)** have distinguished different demand and supply side factors that enrich the growth and influence the factors for comprehensive agriculture growth. **Rupa et al. (2019)** have analyzed the need of fertilizer in horticultural crops to boost up the production of the horticultural crops. Gradually they demand for horticultural crop are increasing both for export and domestic consumption many places have deficiency symptoms of various minerals and soil structure also different in every area. To overcome the lacuna appropriate application of fertilizer management is required. According to **Bader et al. (2020)** irrigation facility is like a blessing for the horticulture. Lack of irrigation facility dishearten the agriculture practices. Drip irrigation helps plants to grow in a better way which directly affect the growth in productivity. **Kundu (2018)** The export chain can give much better result which will increase the interest of the farmers as well as provide a better livelihood to the farmers. According to **Mittal (2007)** the main constraints of horticulture marketing quality products are quality of seeds, lack of irrigation, soil examine facilities (**Kumar and Pal, 2004**), problem in pest management, cost of production, improper post-harvest management, shortage of market knowledge about the different products and the transportation facilities. In Odisha the organizations like ORMAS, Kandhamal Apex Association and Marketing (KASAM) are playing a pivotal role to market the agricultural as well as the horticultural products. As discussed by **Datta (2013)** high temperature and air pollution depreciate the horticultural yields. The horticultural such as apple, saffron, Rhododendron, Orchid, spongy tissue of mango, litchi and floriculture are very much affected by the climate uncertainties. According to **Meena et al., (2009)** in an underdeveloped region post-harvest issue is a very



throbbing for the farmers due to storage and marketing system of the agricultural yields and climate risks. As a consequence, farmers are disheartened by the pull influences. There is a reduction of rice cultivation area due to the climatic hammer (Singh 2018). The agriculture system of Odisha has been affected from the barrage of climate change. As it is the part of semi-arid zone the impact of climate change is a matter-of-fact to think about it.

V. GROWTH AND PRODUCTIVITY OF HORTICULTURE CROPS IN INDIA

In Table- 1 state wise growth percentage of horticulture crops has been portrayed for India throughout the period 2001-02 to 2017-18. It has been observed that the growth scenario of horticulture crop in Odisha is not up to the mark over the period with below 10 percent. Only during 2010-11 has been registered a noteworthy growth with 17.2 percent. Main reason is to lack of focus on horticulture practices in Odisha. Climate is another factor to deteriorate the growth rate of horticulture in Odisha. Market structure is another vigorous factor to deter the horticulture practices. Among the states

Andhra Pradesh, Assam, Gujarat, Madhya Pradesh and Uttar Pradesh have registered a remarkable growth in horticultural, crops practices. The supply side factors like new technology, diversification of value of the crops, increase in price of the crops, area expansion, increasing use of modern seeds, chemical fertilizers and electricity have the combined role to accelerate the cumulative growth of the agriculture productivity. On the other hand, the factors viz., the lethargic growth in inputs, deprivation of soil health, exhausting water table and price policy of the government and credit facility depreciated the productivity of the agriculture sector. "Demand-led growth" in horticulture is supported by pleasing to the eye towards the public infrastructure such as market communication and sound policy implication in the food processing environment. Horticulture crop production has a tremendous impact on agriculture system. The production increases near about 5 times from 5.5 million tons to 54.04million tones since 2013. Innovative technology, market channels, market behavior modern technologies boost the productivity. Despite this India export only 1.4% fruit and vegetable in global share.

Table 1: Crop wise percentage growth of horticulture Production in India.

Year	Fruits		Vegetables		Flowers, Aromatic & Medicinal		Plantation Crops		Spices		Total	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
2001-02	-5.536	5.121	-1.040	-4.296	-33.962	37.383	0.000	0.000	0.000	0.000	-1.941	-0.964
2002-03	23.046	1.635	-0.164	4.149	44.286	-21.088	3.954	60.093	60.093	35.803	18.058	6.180
2003-04	10.599	10.983	10.885	14.617	146.535	41.034	1.451	-38.894	-	-21.748	-3.972	8.896
2004-05	3.278	8.567	6.954	10.028	57.028	4.645	4.290	-24.889	-	-7.398	1.420	9.511
2005-06	4.320	7.600	5.102	3.226	19.693	23.598	-2.285	3.466	3.466	6.694	3.646	4.921
2006-07	5.456	10.114	3.522	11.702	20.299	19.471	-0.530	6.904	6.904	10.220	4.219	10.125
2007-08	4.166	4.390	1.695	0.489	6.039	12.104	0.846	0.459	0.459	-4.866	2.252	1.648
2008-09	3.737	4.455	0.050	3.611	15.913	12.421	1.492	-6.276	-6.276	-3.112	1.036	3.993
2009-10	0.853	4.701	6.387	9.583	1.301	2.699	1.256	19.318	19.318	33.217	4.546	7.722
2010-11	5.045	2.065	5.815	6.667	8.417	35.575	8.197	9.252	9.252	11.234	6.497	6.962
2011-12	4.131	6.361	2.403	3.750	3.947	19.342	1.789	-4.234	-4.234	-3.478	1.940	4.497
2012-13	3.351	9.463	2.075	0.438	-5.316	20.589	0.934	2.828	2.828	2.855	2.127	3.163
2013-14	-	-2.669	1.554	4.040	21.390	-1.535	-3.837	4.869	4.869	3.385	-3.256	1.310
2014-15	15.327	4.135	5.911	-0.244	0.441	2.004	4.131	4.733	4.733	14.407	4.537	1.851
2015-16	3.126	4.135	1.306	5.387	6.360	4.928	-2.228	5.671	5.671	16.228	1.549	5.051
2016-17	1.143	3.033	0.205	3.492	7.629	8.532	4.058	5.639	5.639	0.025	2.334	3.682
2017-18	2.087	4.778	-	-95.152	-99.367	-99.318	-	-96.184	-	-93.727	-	-92.486
	66.834	-85.810	93.594				94.710		96.184		87.544	

Sources: Author's calculation from the secondary data

According to Table- 1 and Figure 1 it is clear that the trend of both the area and production under fruit cultivation is fluctuating over the years. It

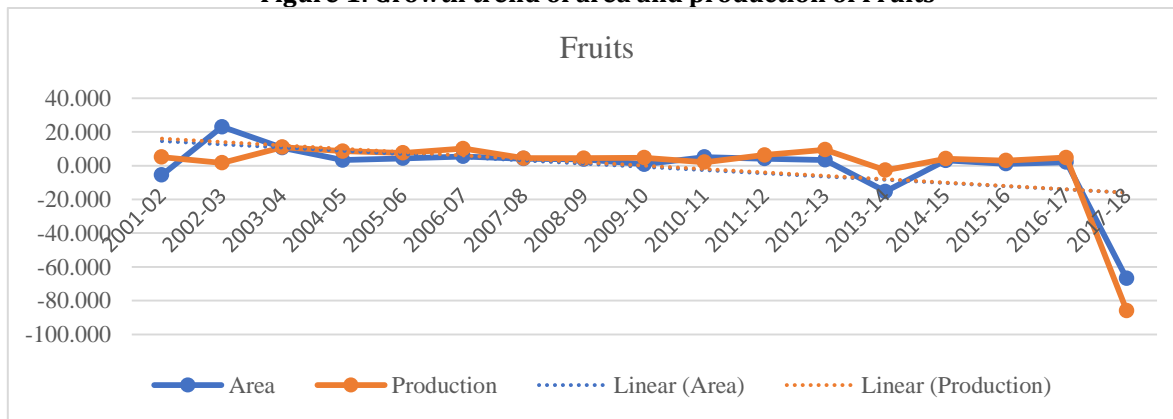
has been noticed that if there is increase in area there is increase in production. Sometime area does not affect the production due to fertility of the lands and



use of fertilizers (both organic and chemical). Some time there is a huge pest problem which directly affect the quantity as well as the quality of the products. Overall growth trend of the fruit cultivation under the horticulture practices for both the area and the production is declined. This is due to the less

demand of confined products. During the period of 2001-02, 2013-14 and 2017-18 the growth rate of area under fruits cultivation is negative and in 2017-18 it is -66.84 percent. Similarly, the growth rate of production of fruits in 2013-14 (-2.669 percent) and 2017-18 (-85.81 percent) is negative.

Figure 1: Growth trend of area and production of Fruits



Likewise, the growth trend of vegetables crops under horticulture is fluctuating throughout the years. It is revealed that there is lack of scope and opportunities for the for the horticulture practices in India. From the Table 1 during the period 2017-18 the growth rate is above the 90 percent with negative sign. It implies

farmers are not interested to adopt the practices as there may be huge risk factors like, market conditions, storage facilities, demotion of export of quality products as there is a huge competition of confined products.

Figure 2: Growth trend of area and production of Vegetables

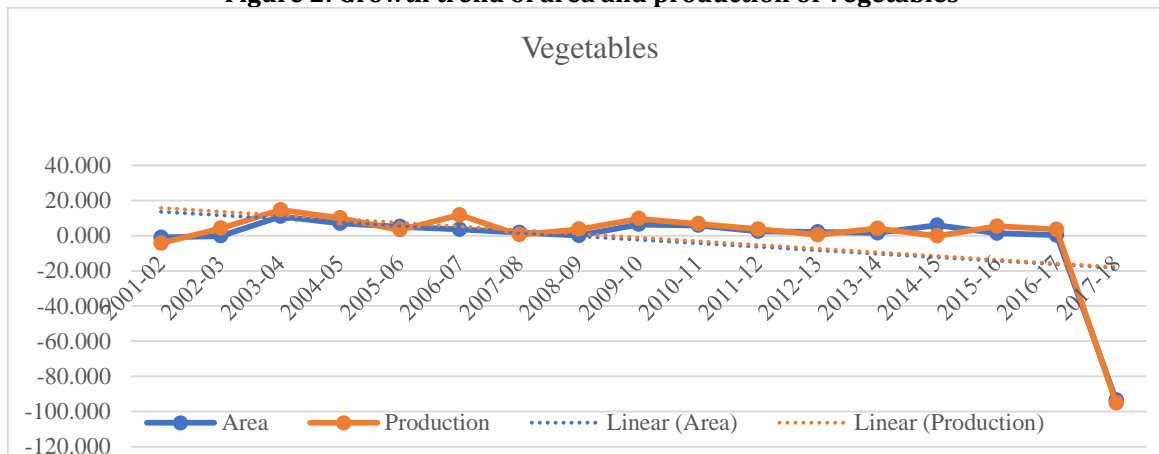
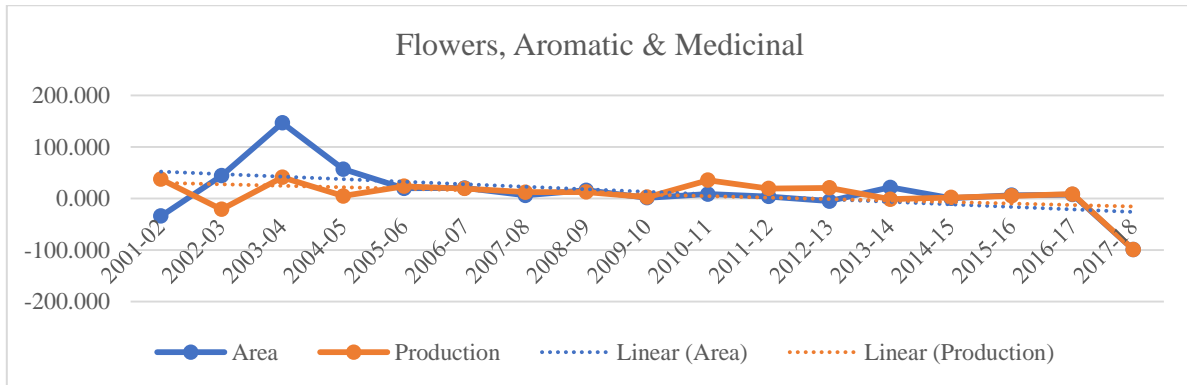




Figure 3: Growth trend of area and production of Flowers, Aromatic & Medicinal plants



It has been observed that have seen there is a positive sight to encourage the production of flowers. It is peak with 146. 53 percent in 2003-04. The government has initiated different policies to encourage the farmers to produce more flowers and spread the floriculture enterprises. But there was some lacuna located in case of business. In bossiness purpose there are some draw backs found where neither the businessman nor the farmers get benefits

which discourage the business personal as well as farmers' interest and as result there is negative trend during the period 2017-18. Though in India floriculture plays an important part of horticulture to grow the agriculture sector but in reality, there are a bunch of problems owing to the market imperfection and weak policy axioms. The insufficiency of new dynamic marketing strategies discourages the Indian farmers to market their yields.

Figure 4 Growth trend of area and production of plantation crops

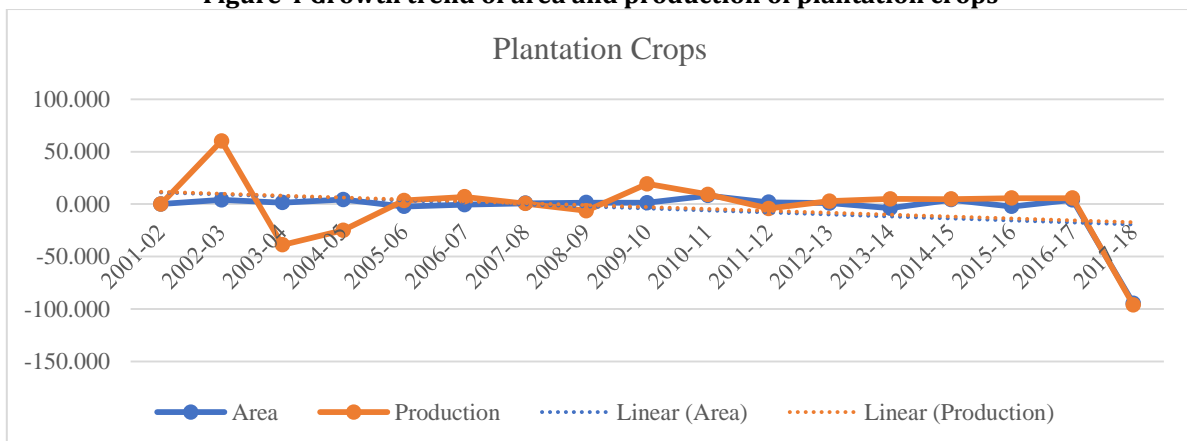




Figure 5: Growth trend of area and production of Spices

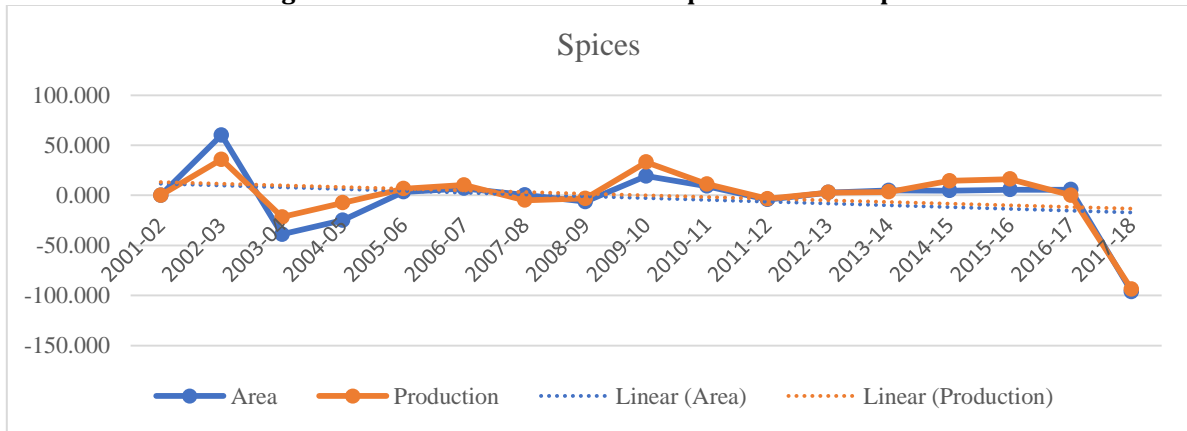
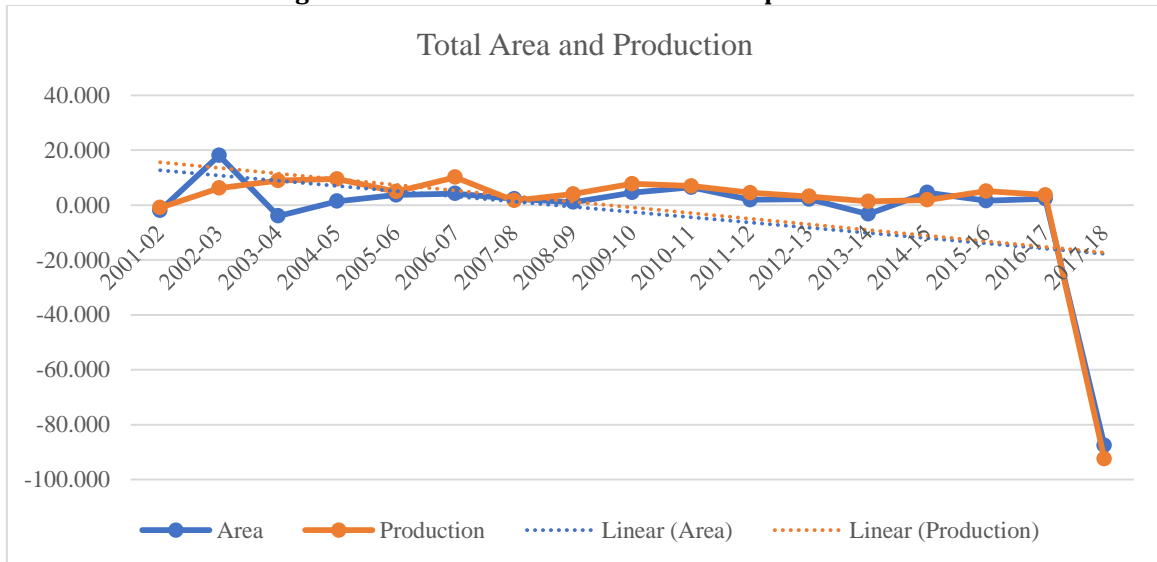


Figure 6: Growth trend of total area and production



Overall growth of fruits, vegetables, flowers, plantation crops, spices are in declining trend. So, there is effective policy implication is required upliftment of the horticulture practices. As the

horticulture practice is one of the dynamic sectors for the rural livelihood, it is important to enhance, mobilize and to reshape to enlarge the rural economy.

**Table 2: Percentage share of different horticulture crops in India during 2001-02 to 2018-19**

Year	Area of fruits	Production of fruits	Area of vegetables	Production of vegetables	Area of flowers, aromatic & medicinal	Production of flowers, aromatic & medicinal	Area of plantation crops	Production of plantation crops	Area of spices	Production of spices
2001-02	24.168	29.496	37.102	60.790	0.639	0.367	17.985	6.652	19.407	2.583
2002-03	23.282	31.308	37.443	58.744	0.430	0.509	18.341	6.716	19.791	2.608
2003-04	24.266	29.968	31.664	57.621	0.526	0.378	16.150	8.585	26.838	3.335
2004-05	27.948	30.543	36.563	60.649	1.350	0.490	17.062	5.891	17.078	2.397
2005-06	28.460	30.280	38.558	60.935	2.090	0.468	17.544	6.161	12.648	2.027
2006-07	28.645	31.053	39.099	59.951	2.414	0.552	16.540	6.260	12.626	2.061
2007-08	28.985	31.049	38.838	60.809	2.786	0.598	15.787	5.349	12.951	2.063
2008-09	29.528	31.887	38.626	60.115	2.889	0.660	15.570	5.280	12.724	1.930
2009-10	30.317	32.028	38.250	59.895	3.315	0.713	15.640	5.342	11.803	1.799
2010-11	29.246	31.130	38.923	60.929	3.212	0.680	15.148	4.992	13.471	2.224
2011-12	28.847	29.705	38.674	60.761	3.270	0.862	15.390	6.359	13.819	2.313
2012-13	29.467	30.235	38.849	60.327	3.334	0.985	15.367	6.318	12.982	2.137
2013-14	29.821	32.081	38.830	58.733	3.091	1.151	15.187	5.877	13.071	2.130
2014-15	26.100	30.821	40.760	60.315	3.879	1.119	15.096	5.543	14.169	2.174
2015-16	25.748	31.512	41.296	59.074	3.727	1.120	15.038	5.821	14.196	2.442
2016-17	25.645	30.906	41.198	59.264	3.903	1.119	14.478	5.978	14.772	2.702
2017-18	25.583	31.233	40.341	59.155	4.105	1.171	14.722	5.801	15.249	2.606
2018-19	146.799	58.985	20.746	38.168	0.209	0.106	6.253	0.565	4.672	2.176

Sources: Author's calculation from the secondary data

It is observed from the Table- 2 that the percentage of area under fruits cultivation is increased up to 2013-14 after that it has been started declining and it is 25.59 percent in 2017-18. In 2018-19 it has increased suddenly to 146.80 percent and accordingly production of fruits has also been increased to 58.98 percent from 31.23 percent from the previous year. This is due to the growing market demand of fruits. People also prefer to have quality of products and as horticulture is one of the best agriculture practices for fruits with scientific technique to improve the quality of food. During the period of 2001-02 the level of production was very low with 29.50 percent.

In case of vegetables, it is quite different. From the Table- 2 it is evocated that the percent share of area and production of vegetable under horticulture cropping practices is stable during the period of 2001-02 to 2017-18 with close to 40 percent and 60 percent respectively. But in 2018-19 the total area has declined to 20.75 percent under vegetable cultivation which is half of the previous years. Similarly, the production in 2018-19 is also declined to 38 percent. This is due to the poor market condition and the adverse climate impact which directly affect the agriculture sector. Sometimes price

of the product affects the horticulture as well as the agriculture practices. Increase in price embolden the framers and vice-versa. Similarly, in case of flowers, aromatic and medicinal plants the area as well as the production is also been decayed. The percentage share of area and the quantity is not even cross the 5 percent over the years. It is very heart throbbing for those are adopting horticulture practices. There is lack of motivations, scope for the products which demote the farmers.

Unlikely, for the plantation crops there is no remarkable increment. The area under plantation crops started falling from 2002-03 and reached it 18.34 percent to 6.25 percent in 2018-19. Similarly, the percentage share of production of plantation crops is also declined to 0.57 percent in 2018-19 from 8.58 percent in 2003-04. In 2003-04 the production of plantation crops was maximum at it was new to the market people were encouraged for the newly emerged products. But gradually due to the market competition and failure in allocation of the products and as a result the dynamic scenario of plantation crops is declined. It is also been revealed that in between the period 2001-02 to 2017-18 the production was stable which affect the dynamism of demand of the product and as an outcome there is a



sudden decline of the production process of the plantation crops. It is spotted that the percentage share of area and production of spices is under horticulture practices is deteriorated to 4.68 and 2.18 percent respectively from the 15.25 and 2.60 percent respectively in 2018-19 from the period 2017-18. In 2001-02 the percentage share of both area and the production of spices was quite noteworthy with 19.40 percent and 2.583 percent respectively. It is observed that the area and production are increased accordingly. It implies when area increases according production of the crops also increase and vice-versa.

VI. INTER-STATE VARIATION IN GROWTH RATE OF HORTICULTURAL PRODUCTION FROM 2008 TO 2018

The growth rate of horticulture production has wide variation across the states in India. In 2008-09, the growth rate is observed to be better in north eastern hilly states, particularly Mizoram, Sikkim and Assam because hilly lands and their climatic conditions are suitable for horticultural crops. The statewise percentage growth rate from 2008-09 to 2017-18 is shown in Table-3. The average growth rate in 2010-11 is 17.52 per cent whereas it is only 1.02 per cent in 2017-18. There is declining trend of growth rate during the period of study. The coefficient of variation in growth rate is highest in 2015-16 and lowest in 2008-09. Since the coefficient of variation is above 100 in all the years, it implies significant variation in horticulture production across the states in India.

Table 3: State wise growth percentage of horticulture Production in India

State	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Andhra Pradesh	8.4	18.5	3.4	19.9	2.7	-20.5	-25.8	37.3	2.8	9.01
Arunachal Pradesh	-14	-62.5	293.8	-36.1	1.7	-10.8	-12.1	-50	1.2	0.68
Assam	32.2	-23.3	8.5	8.4	-7.1	8.4	7.8	-8.8	1.5	19.61
Bihar	1.4	5.4	7	4.2	-7	-1.2	-1.3	0.7	11.5	0.5
Chhattisgarh	18.9	17.6	8.4	6	10.2	8.6	7.9	7	5.8	-1.09
Gujarat	12.5	20.6	3.1	10.9	3.4	6.1	5.8	0.2	-3.6	1.56
Haryana	3	14	12.3	-1.8	10.7	5.9	5.5	1	14.1	-0.76
Himachal Pradesh	-5.4	32.3	-17	1.4	20.6	2.8	2.8	-9.5	-0.8	-2.33
Jammu & Kashmir	13.1	25.8	1.1	-17.9	10.7	0.8	0.8	4.2	-1.9	8.9
Jharkhand	0.3	20.8	-2.8	9.7	-1.5	-7.8	-8.5	2.5	2.4	1.13
Karnataka	1.1	19.8	4.6	5.6	-4.9	2.3	2.3	8.8	0.1	-11.892
Kerala	-0.5	0.3	1	0.3	5.4	-3.9	-4	-1.2	9.3	-2.42
Madhya Pradesh	-7.6	27.7	77.7	39.5	3.7	7.6	7.1	17	-0.4	8.06
Maharashtra	-4.2	3	12.9	-7.2	32	-8.5	-9.2	9.1	13	-8.57
Manipur	-2.3	0.9	17.9	6.2	18.7	-0.2	-0.2	7.8	-5.5	1.43
Meghalaya	0	-8.7	7.5	11.5	18.8	1.8	1.8	6.1	-10.8	-0.84
Mizoram	101.2	-13.9	15.3	43.6	9.8	-14.9	-17.5	6.5	-0.3	-1.11
Nagaland	29.1	-15.9	118	-9.7	78.9	2.1	2.1	7.5	-4.1	-15.58
Odisha	7.7	-7.4	17.2	1.5	-0.6	-2	-2	1	-0.2	-2.14
Punjab	6.3	2.5	-88.4	-9.7	78.9	276	73.4	4.7	6.8	5.55
Rajasthan	42.7	36.5	-20.5	37	-4.6	28.4	22.1	11.9	-8.3	7.17
Sikkim	43.4	13.8	-7.9	32.6	-4.5	-4.3	-4.5	41.3	22.6	11.57
Tamil Nadu	-12.7	25.8	-0.6	-10.5	8.9	-7.2	-7.7	-3.6	-5.2	-3.78
Uttar Pradesh	17.7	0.5	4.8	2.5	3.1	21.4	17.6	5.5	1	-1.26
Mean	12.47	4.41	17.52	6.67	10.32	10.81	2.41	1.69	3.89	1.02
S.D	23.65	25.71	64.52	17.71	22.08	53.92	17.18	19.15	11.18	7.03
C.V	189.61	582.80	368.28	265.45	214.02	498.70	711.63	1130.54	287.14	692.18

Sources: National Horticulture Board, Ministry of Agriculture & Farmers Welfare, Government of India



VII. HORTICULTURE IN ODISHA

Odisha produces about 10.30 million tons of horticulture products from an area of 1.21 Million hectares and accounts for 4.28 percent of the total horticultural production of the country. The agro-climatic conditions are immensely suitable for perennial fruit crops like mango, litchi, guava, Oranges, and lime annual fruit crops like banana, pineapple, and papaya spices like ginger, turmeric, and chilly variety of roots and tuber and a whole range of vegetables. Odisha ranks 2nd position as per production of vegetables at the national level. The per capita consumption of vegetables is highest in the country. Over the years, horticulture has emerged as one of the most potential agricultural enterprises in accelerating the growth of the economy. There are many reasons to develop horticulture in the rural area of Odisha. Due to the rising domestic demand for horticulture commodities, driven by rising incomes, urbanization, and perhaps changing preferences. On the other, trade liberalization has opened export

markets in other countries where high-income consumers demand fruits, vegetables, and spices which have put a lot of demand for horticultural products. And finally, market reforms have allowed more foreign direct investment in developing countries, introducing more competition in food processing and retailing sectors, as well as allowing foreign companies to organize production for export. Under NHM Odisha performed well and a National level winner. It includes planting material production to post-harvest management. Horticulture can provide better livelihood along with much better income opportunity. A positive growth trend was seen in the production of fruit and vegetable from 18-23% to 10-20% during 1993-94 to 2011-12 the share of horticulture sector accounts near about 37% of total agricultural commodity exported. The production trend shows 5.3% per year growth rate between 2001-02 to 2016-17.

The comparative growth trend between India and Odisha has been shown in Table- 4.

Table 4: Comparison of growth percentage of horticulture production between Odisha and India

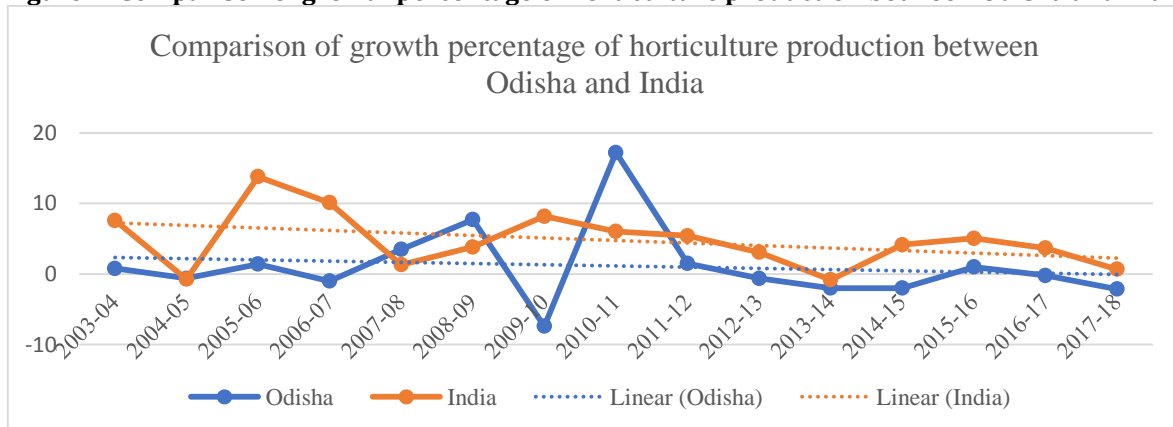
Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Odisha	0.8	-0.6	1.4	-1	3.5	7.7	-7.4	17.2	1.5	-0.6	-2	-2	1	-0.2	-2.14
India	7.6	-0.72	13.78	10.11	1.32	3.84	8.19	6.02	5.43	3.09	-0.82	4.16	5.05	3.68	0.69

Sources: Author's calculation from the secondary data

It is seen that the overall growth trend is declining over the year. In Odisha the during the period of 2009-10 it is negative with -7.4 percent. This might be due to the inattention of market policy for the horticultural products which push back the farmers not to produce more. Also due to the storage facilities, export promotions measures discourage the horticulture practices. On the other hand, to overcome the negative growth pattern various incentives

have been taken and as a result there is a sudden growth of overall horticulture productivity during 2010-11 with 17.2 percent. One peculiar thing has been observed from the period of 2003-04 to 2012-13 the trend is opposite to each other between India and Odisha. When the growth trend of Odisha has increased the growth trend of India has declined and vice versa. After 2012-13 the trend of India and Odisha has fluctuated.

Figure 7: Comparison of growth percentage of horticulture production between Odisha and India





IX. SUGGESTIONS AND CONCLUSION

From the above analysis it is revealed that there are many lacunas for the growth of horticulture practices. Horticulture plays an important role for rural livelihood as it has the great impact on rural employment Enforcement of Government scheme to enhance the horticulture practices. As still there is a problem of food security there is a need to circulate food security chain to curb the problems like starvation and nutrition. It is clearly outlined from the study that horticulture sector is suffering from various issues like market structure, technical, economical as well as geographical discrepancies. To recovery from these sorts of maladies and to make agriculture as well as horticulture sector grass root level research-based approaches should be undertaken by the government. The suggestions for improvement of Horticulture are state below.

- (i) To solve the spatial discrepancies between inter and intra-states the barebones such as technology, crop varieties, augmenting credit delivery, specification of region and plans for specification crops and approaches should be implemented to abate the unstable development in agriculture.
- (ii) To use new technology, knowledge of time operation and they suggest to improve more field mechanism for more benefit through more research.
- (iii) Education level of the farmers needs to be improved. As we know diffusion of innovation is an important medium to channelize the new idea and knowledge and to create awareness about the new strategies. The short messaging service (SMS) through mobile phones has a crucial role circulate and to aware the people about new knowledge. But it is significant to say that except education there no value of new idea and new knowledge.
- (iv) To implement by the government and to adoption capacity of the farmers depend on their own education and skill. Notwithstanding the cost usefulness, mobile messaging has persisted a hindrance of the end users in the farming sector. As it is observed the only and ultimate factor that influences to adopt extension services is the education level of the farmers or the users. The factors like irrigation facility, market condition of the horticultural products, promotion of the crops, storage facility of the crops, training of the farmers and environmental factors such as climate and geographical characteristics such as quality of soil and ground water table influence the horticulture practices as well as other agriculture productivity and export of the products.
- (v) The environmental factors such as climate and geographical characteristics such as quality of soil and ground water table influence the horticulture as well as other agriculture productivity and export. To increase the horticulture export and ultimately achieve sustainability the role institutions is very crucial. The institutions like The Agricultural and Processed Food Products Export Development Authority (APEDA), International Standard Organization (ISO) to assure and quality control, National Cooperative Development Cooperation (NCDC) etc. play a pivotal role to accelerate the export as well as productivity. Export of Horticultural yields depend on dynamics like domestic production and ingestion, exportable excesses, consumer prejudices, varieties merchandized, quality, domestic and international prices and accessibility of infrastructure facilities for storage and post-harvest management.
- (vi) Various government initiative and projects are moving the interest of people from traditional grains cultivation towards horticulture produce. He analyses how government projects in Nepal doing well apart from its geographical location. Large cardamom, tea, coffee are the leading products which give a push to trade –off with other countries. These cash crops are benefited the farmers and differ reward of government push the interest of people towards the cash crops.
- (vii) It would be better if the farmers adopt proper knowledge, suitable technologies and financial assistance to curtail the risks. The authors have also been stated that to get the better effect for the post-harvest issues farmers' organization can be formed at the cluster level to link with the market and training should be provide by emphasizing the approaches of the market.
- (viii) To make agriculture sustained the techniques like conservation agriculture, use of renewable energy, forest and water conservation should be followed in the horticulture practices.
- (ix) To adopt and implement better irrigation facilities to the rural small and marginal farmers so as to utilize all their barren land to increase their productivity and can boost



their livelihood during the climate change specially shortage of rainfall.

Many evidences reveal that climate change has already affected horticultural production. Horticulture production affected by causes related with a biotic stresses and biotic stresses. For profitable commercial product and satisfying demand of product hi-tech horticulture practice taken into account. Precision farming are more popular among the farmers. Moreover, awareness, skill and quality control strategies depreciate the turnover and so as the farmers in India. It is observed that the tribal as well as other farmers also growing turmeric with traditional method that would be the cause of deteriorate the yield. Land preparation and post-harvesting matters are other characteristics to increase the productivity but as the tribal people are far away from the mainstream of the cotemporary world, they are inept to adopt the new and effective strategies to enhance their productivity. The introduction and standardization of high density planting in key fruits can ensure optimum utilization of land, light and nutrients resulting good harvest of horticultural crops. Good horticultural practices, integrated production and pest management and organic farming can lead to sustainable and environmentally friendly horticultural crops.

REFERENCES

1. Babu, N., Shukla, A.K., Tripathi, P.C. & Prusty, M. (2015). Traditional Cultivation Practices of Turmeric in Tribal Belt of Odisha. *Journal of Engineering Computers & Applied Sciences (JECAS)* 4(2), pp.52-57.
2. Bader, B. R., Abood, M. A., Aldulaimy, S. E. H., Al-Mehmdya, S. M. H., & Hamdi, G. J. (2020). Effect of water deficit and foliar application of amino acids on growth and yield of eggplant irrigated by two drip systems under greenhouse conditions.
3. Bhan, S. & Behera, U. K. (2014). Conservation agriculture in India – Problems, prospects and policy issues. *International Soil and Water Conservation Research*, 2(4), pp. 1-12.
4. Birthal, P. S., Joshi, P.K., Chauhan, S. & Singh, H. (2008). Can Horticulture Revitalise Agricultural Growth? *Indian Journal of Agriculture Economics*, 63(3), pp. 310-321.
5. Datta, S. (2013). Impact of Climate Change in Indian Horticulture - A Review. *International Journal of Science, Environment and Technology*, 2(4), pp. 661-671.
6. Gowda, M.J.C. & Dixit, S. (2015). Influence of farmers' educational level on comprehending, acting-upon and sharing of agro advisories. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 116(2), pp. 167-172.
7. Meena, M.S., Kumar, A., Singh, K.M. & Meena, H.R. (2009). Farmers' Attitude Towards Post-Harvest Issues of Horticultural Crops. *Indian Research Journal of Extension Education*, 9 (3), pp.15-19.
8. Mittal, S., (2007). Strengthening Backward and Forward Linkages in Horticulture: some successful initiative. *Agricultural Economics Research Review*.pp.457-469.
9. Patra, R. (2014). Agricultural development in Odisha: Are the Disparities Growing? *International Journal of Food and Agricultural Economics*, 2(3), pp. 129-144.
10. Sahoo, P.P., Sarangi, K.K., Sangeetha, M., Shasani, S. & Saik, N.H. (2018). SWOT Analysis of Agriculture in Kandhamal District of Orissa, India. *International Journal of Current Microbiology and Applied Sciences*, 7(8), pp. 1592-1597.
11. Singh, A. (2018). Assessment of different strategies for managing the water resources problems of irrigated agriculture. *Agricultural Water Management*, 208, pp. 187-192.



A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS AYURVEDIC PRODUCTS SPECIAL REFERENCE WITH LEVER AYUSH PRODUCTS IN COIMBATORE CITY

Ms.P.Priyanka¹, Mr.M.R. Chandra Sekar²

¹Scholar, Dr.N.G.P. Arts and Science college

²Assistant professor, Dr.N.G.P. Arts and Science college

1. INTRODUCTION

‘Ayurveda’ is the ‘Science of life’. Life is connected with health, Ayurveda is meant to be the ‘Science of human health’. Ayurveda’s approach towards healing is holistic. It does not deal with individual organs in isolation, but treats the body as a whole. There is evidence that Ayurveda is treating any disease or problems. More important, it does not give temporary relief, but cures the disease.

India is the origin of Ayurveda. Ayurveda has 8 ways to cure illness, called NADI (pulse), Mootra (urine), Mala (stool), Jihva (tongue), Shabda (speech), Sparsha (touch), Druk (vision), and Aakruti (appearance).

Ayurveda has the strong belief that it would be transmitted from god to sage and then it treats the human body. Ayurveda follows the concept of **Dinacharya** which says that natural cycles (walking,

sleeping, working, meditation etc.) are important for health. In some research says that India uses Ayurvedic individually or combine with some western medicine. According to modern Ayurvedic research, the birth period of Ayurveda has been predicted around 6,000 BCE when they originated as an oral tradition. Ayurveda has developed many products like Medicine, cosmetics etc. It is one of the oldest medical systems and remains one of India’s traditional health care systems. Ayurvedic treatment follows the products that from Plants, animal, metal and mineral.

Ayurveda is the biotic and chemical free way. Some people use ayurvedic practices to maintain health, reduce stress and improve flexibility, strength and stamina with practices like yoga and meditation can be. A daily used product of ayurvedic products are soap, shampoo, hair oil, face wash, face cream.

suffering from lack of plans and innovations of poor marketing. Attitude of customers also affects the purchasing of these products.

2. STATEMENT OF PROBLEM

Lever Ayush product whose goal is to connect people with them. It has different products that include Healthcare, medicines, nutrients and cosmetics. Lever Ayush sells their products at the best fair rates in the market. People are satisfied with the quality and performance of lever ayush products like toothpaste, soap, face wash etc.. External factors like size, shape, intensity and status are also good. But, there are some issues and problems related to Lever Ayush products. Some side effects occurred while users use these products. Ayurvedic companies are

3. OBJECTIVES OF THE STUDY

1. To know about the demographic and socio economic outline towards LEVER AYUSH products by the customer.
2. To identify the factors influencing customer to buy lever ayush products.
3. To know the satisfaction level of customers after using Lever Ayush products.



4. To calculate the level of awareness among customer towards ayush products.

5. To provide valuable advice based on the study.

4. SCOPE OF STUDY

In an attempt to investigate the customer preference and satisfaction towards Lever Ayush products, the study has been covered Lever Ayush consumers of Urban and Rural areas, both educated and uneducated people. The company has to analysis their customers fulfillment towards their products or services provided by them.

5. LIMITATION OF THE STUDY

There is an partial information because of questionnaire. Accurate result of the primary data collected for the study depends upon the originality of the information filed by the respondents of questionnaire. Due to the shortage of time the sample size was limited to 135 only. The study was restricted to Coimbatore city only.

6. TOOLS USED FOR THE STUDY

The tools used for my study are

- Simple percentage test
- Ranking analysis test
- Weighted average test
- Chi-Square test

7. RESEARCH METHODOLOGY

Research methodology is a specific procedures to systematically solve the research problems. The study has been proven that the research has done scientifically. The study concludes with overall result, data collection methods and analysis procedure.

AREA OF THE STUDY

The study is undertaken in Coimbatore city.

SAMPLE SIZE

The study is restricted to 135 respondents.

SAMPLING TECHNIQUES

Convenience sample technique is used for the study.

PERIOD OF THE STUDY

The period for the study is 4 months i.e January 2021 – March 2021.

METHOD OF DATA COLLECTION

Questionnaire method is used to collect the data from the respondents.

SOURCES OF DATA

The study covers primary data and secondary data. The respondents through questionnaire is primary data and the data is collected from articles, books, magazines and newspaper is secondary data.

8. MEANING AYURVEDA

Ayurveda is the science that deals with living things or long-lasting which helps in the betterment of health, prevention of diseases and stay for long life. The basic philosophy of Ayurveds is based on the Panchamahabhoota (five elements) theory. This theory states that the universe , human body is made up of five elements are,

- AIR (Vaayu)
- SPACE (Akash)
- EARTH (Prithvi)
- FIRE (Agni)
- WATER (Jal)

These elements merge to form controlling forces or biological humours called Doshas. According to the philosophy of Ayurveda, health is not only maintained by taking a balanced diet but also by proper good food.

9. SOURCES OF AYURVEDA

In ayurveda, the types of products prepared based on the source from which they are obtained, are classified as follows:

HERBAL – Which are extracted from plants & herbs

MINERAL – Which are extracted from minerals and gems

HERBOMINERAL – Which are a combination of both herbs and minerals

10. LEVER AYUSH BRAND ANALYSIS

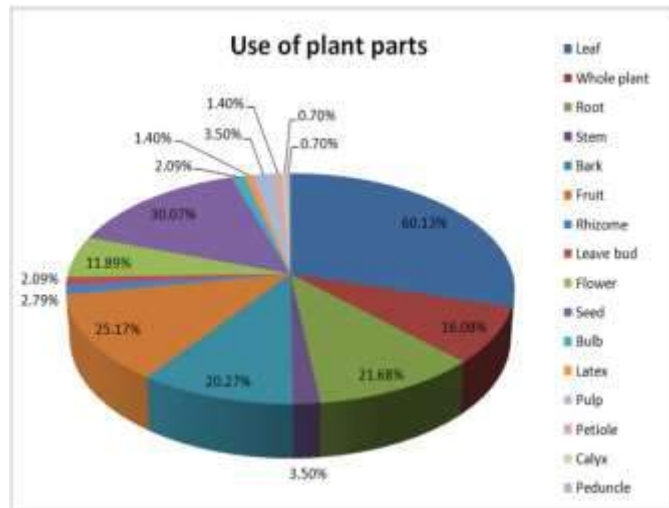
Parent company : Hindustan Unilever Ltd

Category : Fast moving consumer goods

Sector : Rapidly moving consumer goods

Tagline/ slogan : Truth of ayurveda proof of science

USP : Ayush is a unique combination of the Truth of Ayurveda with the Proof of science.



India's health insurance companies offering AYUSH benefit to their policyholders due to popularity of alternative treatments . As per the ayush coverage medical expenses which are incurred on in-patient treatment under Homeopathy, Ayurveda, Siddha or Unani are reimbursed under AYUSH. In the upcoming years, Maximum everyone tries to jump into the chemical free and healthy lifestyle . It has been built on the principles of true ayurveda through the range of products across all personal care categories.

Herbal hills is one of the trusted company in India which produce Ayurvedic skin care products to promote healthy skin . The collaboration between ayurveda, anti-aging and cosmeceuticals is increasing importance in the beauty, health and wellness sector. Ayurvedic cosmeceuticals are very much prized and welcomed in the today market.

11. IMPORTANCE OF USING AYURVEDIC PRODUCTS

Ayurveda was officially recognized by WHO (World Health Organisation) in 1976. Ayurveda increases the health based habits in the modern society and it helps us to live a healthy and stress free life.

12. FINDINGS OF THE STUDY

- Majority 61.48% of the respondents are female.
- Majority 57.71% of the respondents are between 18-21 years of age.
- Majority 76.30% of the respondents are unmarried.
- Majority 61.48% of the respondents are students.

There are number of people uses these ayurvedic products regularly and feels good about the product. There is an less chance of skin issues.

Ayurvedic practices also improves steadiness which results in better sleeping, pure mind, spirit and a healthy body.

There is very less side effects because it utilizes natural ingredients and uses herbal plants and seeds.

According to previous study and secondary data Ayurvedic skin products are made of 100% natural ingredients. You can find less amount of chemical ingredients in this products. So it doesn't cause skin allergies and skin problems and irritation on your skin.

Apart from the natural products they do not use synthetic fragrances. So it wont be an issue to the consumers.

Ayurvedic products are cost effective like other cosmetics products.

According to the research and study, it is suggested that Ayurvedic skin care products are long term benefits in comparison to other cosmetic products in Coimbatore city.

- Majority 56.20% of the respondents monthly income are below 20,000.
- Majority 57.78% of the respondents are from rural area.
- Majority 61.48% of the respondents are under graduate level.
- Majority 83.70% of the respondents are from nuclear family.
- Majority 62.22% of the respondents are prefer ayurvedic products.



- Majority 46.67% of the respondents are buying this product frequently.
- Majority 91.11% of the respondents are aware about Ayush brand.
- Majority 45.19% of the respondents are buy ayush product.
- Majority 45.19% of the respondents are answers the price of ayush products are average.
- Majority 65.19% of the respondents are satisfied about the products.
- Majority 38.52% of the respondents are buy these products in super market.
- Majority 47.70% of the respondents are use these products from 6 months.
- Majority 57.04% of the respondents are selected Himalaya as its competitor.
- Majority 88.89% of the respondents are never face any problems.
- Majority 39.26% of the respondents are needed improvement in fair price.
- Majority 93.33% of the respondents are recommended to their friends.

13. SUGGESTIONS

Most of the respondents are opinioned that they want more availability for this lever ayush products. Most of the respondents are suggest to reduce the price of this product. It has high quality so more and more consumers buy lever ayush products. Lever ayush should increase the productivity and make sure that there will be no shortage of products in market.

14. CONCLUSION

The study gives the knowledge of the various view and their association with customer satisfaction. It based through questionnaire pattern for the research and findings. This study results the customer satisfaction in the following factors (price, quality, variety, loyalty, location)

Lever ayush sells its products with a very high quality . Many like likes to adopt towards Lever ayush because of quality and promoting quotation as 'Ayurveda' and 'health and safety', it works very effectively for promotion. It has a reasonable price. On considering this study, it can be concluded that lever ayush product have gained significant place in the market and capture a huge lot of customers due to its quality, price, variety, loyalty and location.

15. REFERENCES

1. Shinde, D.T., and Gharat S.J Product positioning of Ayurvedic products (Last updated on 2017) (PCM free article) (PubMed) (Google Scholar)
2. Chandiraleka E, Dr. HamsalakshmiR Customer satisfaction of Ayurvedic and Herbal products. August 2016 (PCM free article) (Google Scholar)
3. Gomathi D, Muruganantham Baba Ramdev came up with unique package model of Ayurveda couple with pranayama. 2016 (PCM free article) (Google Scholar)
4. Nagaraju and Thejaswini Identification of customer preference of eco friendly products in 2015 (PCM free article) (Google Scholar)
5. Gupta PD. Pharmacogenetics, pharmacogenomics and ayurgenomics for personalized medicines: A paradigm shift. *Indian J Pharm Sci.* 2015; 77:135-41. (PMC free article) (PubMed) (Google Scholar).
6. Semwal DK, Mishra SP, Chauhan A, Semwal RB. Adverse health effects of tobacco and role of Ayurveda in their reduction. *J Med Sci.* 2015;15:139-46. (Google Scholar)
7. Youyou Tu- facts. Nobel Prize.org. Nobel Media AB 2014. Nov 2.
8. Pal D, Sahu CK, Haldar A. Bhasma: The ancient Indian nanomedicine. *J Adv Pharm Technol Res.* 2014;5:4-12. [PMC free article] [PubMed] [Google Scholar]
9. Mishra S, Gupta AK, Kedar LM. Concept of research methodology in Ayurveda. *Int Ayurvedic Med J.* 2013;1:1-5. (Google Scholar).
10. Jacqui W. Herbal products are often contaminated, study finds. *BMJ.* 2013;347:F6138. (PubMed) (Google Scholar)
11. Sharma PV, editor. *Sushruta Samhita, Sutra Sthana. Ch. 1, Ver.22. Vol. 1. Varanasi: ChoukhambhaVisvabharati; 2013. P.16*
12. Manmohar PR, Eranezhath SS, Mahapatra A, Manohar SR. DHARA: Digital helpline for Ayurveda research articles. *J Ayurveda Integr Med.* 2012;3:97-101. (PMC free article) (PubMed) (Google Scholar).
13. Dwivedi V, Anandan EM, Mony RS, Muraleedharan TS, Valiathan MS, Mutsuddi M, et al. In vivo effects of traditional Ayurvedic formulations in *Drosophila melanogaster* model relate with therapeutic applications. *PLoS One.* 2012;7:e37113. [PMC free article] [PubMed] [Google Scholar]
14. Sudha VB, Ganesan S, Pazhani GP, Ramamurthy T, Nair GB, Venkatasubramanian P. storing drinking water in copper poi kills contaminating diarrhoeagenic bacteria. *J Health Popul Nutr.* 2012;30:17-21. (PMC free article) (PubMed) (Google Scholar)
15. Datta HS, Mitra SK, Patwardhan B. Wound healing activity of topical application forms based



- on Ayurveda. Evid Based Complement Alternat Med 2011. 2011;134378. (PMC free article) (PubMed) (Google Scholar)*
16. *Basisht G. Exploring progression of Ayurveda. Ayu. 2011;32:445-7 (PMC free article) (PubMed) (Google Scholar)*
17. *JayasundarR . Ayurveda: A distinctive approach to health and disease. Curr Sci. 2010; 98:908-14. (Google Scholar)*
18. *Bhowmick TK, Suresh AK, Kane SG, Joshi AC, Bellare JR. Physicochemical characterization of an Indian traditional medicine, JasadaBhasma: Detection of nanoparticles containing non-stoichiometric zinc oxide. J Nanopart Res. 2009;11:655–64. [Google Scholar]*



A STUDY ON AWARENESS ATTITUDE AND BEHAVIOUR OF CONSUMERS TOWARDS ECO FRIENDLY PRODUCTS IN COIMBATORE CITY

Mr. P. Vimal kumar¹, Mr. V. Jayaprakash²

¹Assistant professor, Department of commerce, Dr. N.G.P Arts and science college, Coimbatore

²Student of III B.com, Department of commerce, Dr. N.G.P Arts and science college, Coimbatore

ABSTRACT

This project report is the result of customer behavior of Eco-friendly products in Coimbatore. The objective of the study to find out the behavior of customer towards Eco- friendly products in Coimbatore, and offer some valuable suggestion on the basis of the study. This study has covered the consumer of Eco-friendly products. The research design adopted for this study was descriptive research design. The sample size is 120. the sampling technique used for this purpose was simple random sampling. For conducting survey a questionnaire was prepared. for this study purpose two types of data were collected, the data collected through questionnaire forms the primary data, the data collected journals, website and records of the forms this secondary data. The data so collected is then classified and tabulated for the purpose of analysis and then percentage analysis was used as statistical tools for analysis purpose.

KEYWORDS: Brand, Customer, Market, Preference, Satisfaction.

INTRODUCTION

The term eco-friendly describes a product that is not hurtful to the environment. However, it can get more complex than that, as there are many factors of something that might be harmful to the environment. So many different things can negatively influence the environment, such as not using proper measures when disposing of products. Eco-friendly products may seem to be more expensive, but long-term they are actually more professional. Eco-friendly products tend to last much longer. These products are typically made from recycled materials and are sturdy, withstanding most drops, kicks, and dishwashers.

STATEMENT OF THE PROBLEM

The purpose of the study is to find out the level of satisfaction towards the environmental concern products. The main aim is to find out how the consumer behaves when they are about to purchase ecofriendly product. Are they looking for the products which are creating any problem to the environment or not creating any harm to the environment? And to find out the steps or actions what they have taken and motivated others to go for making no harm to the society or the environment.

1. What is the level of environmental knowledge and concern of the respondents?
2. What is the level of awareness and attitude of consumers towards the eco-friendly products?
3. What would be the Purchase behaviour of consumer towards the eco-friendly products?
4. How far do the various determinants influence the purchase of eco-friendly products?
5. What may be the barriers the consumers are facing during eco-friendly products' purchase?

OBJECTIVES OF THE STUDY

The objectives of the study are

1. To assess the level of environmental knowledge and concern of the respondents.
2. To assess the level of awareness and attitude of consumers towards the eco-friendly products.
3. To examine the Purchase behaviour of consumers towards the eco-friendly products.
4. To identify the determinants of the purchase of eco-friendly products.
5. To analyze the barriers in purchase of eco-friendly products.



SCOPE OF THE STUDY

The study has been confined to the district of Coimbatore located in the state of Tamil Nadu in India. The sample was selected from this place and was restricted to a number of 500 respondents. The eco-friendly goods alone in terms of environment protection have been selected and the data has been collected through the structured questionnaire from the respondents.

METHODOLOGY

The research is investigative and qualitative in nature and the methodology adopted for the study is presented below:

PRIMARY DATA

Primary data is collected by the random sampling method. Hence we have interviewed 100 customers through Questionnaire and personal interview and collected the primary data.

SECONDARY DATA

Secondary data are generally published sources which have been collected originally for some other purpose, they are not gathered specially to achieve the objectives for some other purpose, they are not gathered specially to achieve the objectives of the particular research projects hands but already assembled.

SURVEY TECHNIQUES

Once the researcher has decided to use survey method for collecting data he has to make a decision to adopt any one of the following survey techniques

1. Personal interview
2. Telephone survey

TOOLS USED FOR STUDY

- Simple percentage analysis
- Rank analysis.
- Weighted average analysis
- Chi-square analysis

LIMITATIONS OF THE STUDY

1. This research was location - specific and was confined to the district of Coimbatore in the state of Tamil Nadu in India. Hence the results of this research may not be applicable to other parts of globe.
2. The study adopted convenient sampling which was one of the methods of non probability sampling and hence the limitations of this technique are applicable.
3. The study has all the limitations of a qualitative research, namely subjectivity and personal bias.
4. Post - purchase behaviour of the respondents was outside the scope of this study.

LITERATURE REVIEW

Phuah Kit Teng (2020)

Expressed that societal marketing business ethics and corporate social responsibility has become the guideline for green marketing strategies and practices. Consumer concerns towards the environment are the evidence which steadily increases the ecologically conscious marketplace. Consumers' awareness and attitude on food products which market in green marketing is important in guiding their purchasing intention of environmentally friendly food products. Consumer attitude is the moderator in the relationship between subjective norms and their intention to purchase environmentally friendly food products. However, attitude is not a moderator variable in the relationship between perceived behaviour control and consumer intention to purchase environmentally friendly food products.

Vazifehdust, H and Asadollahi, A. (2019)

In their article have attempted to describe what is meant by social responsibility and explain its relation to marketing of eco-friendly products, take a closer look at green marketing and also the ways of implementing the green marketing concepts in some of Iran's industries. In this context, this paper has highlighted some of the areas like product design, product positioning, packaging material and design, advertising, sales promotion, personal selling, services where the companies could focus on by re-engineering their production processes, product design and service position, in order to solidify their positions in the competitive market, otherwise being left behind in the green trend. To establish competitive advantage, the paper suggested greening in the production process and reduced expenditure which will cause an enhanced image of the company in the customers' eyes and increased loyalty.

DATA ANALYSIS AND INTERPRETATION

The term analysis refers to the computation of certain measures along with searching of patterns or relationship that exist among data groups. After collection of data, the data has to be processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research planing.

Section A: deals with,

- Simple percentage analysis of collected data.

Section B: deals with application of statistical tool such as,

- Rank analysis
- Weighted average analysis
- Chi-square analysis



SIMPLE PERCENTAGE ANALYSSIS

TABLE 1
Gender of the respondents
GENDER

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	81	67.5	67.5	67.5
female	39	32.5	32.5	100.0
Total	120	100.0	100.0	

SOURCE:QUESTIONNAIRE

INTERPRETATION

Majority of the respondents are male.

The above table shows the gender of the respondents. It is clear that 67.5% are male and 32.5% are female.

RANK ANALYSIS

TABLE 1
Motivation of buying eco-friendly products

FACTOR	1(4)	2(3)	3(2)	4(1)	TOTAL	RANK
ECOMICAL	57 228	24 72	26 52	13 13	120 365	I
HEALTHIER	18 72	65 195	21 42	16 16	120 325	II
PRESERVE THE ENVIRONM ENT	28 112	34 102	40 80	18 18	120 312	III
BETTER PRODUCT	20 80	46 138	23 46	31 31	120 295	V
WAYS OTHERS TO CARE ABOUT ENVIRONM ENT	24 96	43 129	31 62	22 22	120 309	IV

INTERPRETATION

Economically are ranked I by the respondents.

The above table shows the motivation of buying eco-friendly products that are ranked bt the respondents.



WEIGHTED AVERAGE

**TABLE 1
REGARDING THE PROBLEMS IN THE PURCHASE OF ECO-FRIENDLY PRODUCTS**

FACTOR	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
LACK OF AWARENESS	70 350	36 144	12 36	1 2	1 1	120 497	4.141
HIGH PRICE	32 160	71 284	13 39	3 6	1 1	120 490	4.083
UNAVAILABILITY	37 185	43 172	35 105	4 8	1 1	120 467	3.891
GREEN WASHING	28 140	48 192	26 78	12 24	6 6	120 440	3.666

INTERPRETATION

The above table shows the regarding the problems in the purchase of eco-friendly products.

The highest mean score is 4.141 for the lack of awareness.

CHI SQUARE ANALYSIS

**TABLE 1
RELATIONSHIP BETWEEN EDUCATIONAL LEVEL AND ANNUAL INCOME**

S NO	EDUCATIONAL LEVEL	ANNUAL INCOME				TOTAL
		5000-10000	10000-20000	20000-30000	30000-40000	
1	NO FORMAL EDUCATION	23	13	6	6	48
2	HIGHER SECONDARY LEVEL	9	8	3	10	30
3	UNDER GRADUATE	5	4	1	1	11
4	POST GRADUATE	13	12	2	4	31
	TOTAL	50	37	12	21	120

To find out the association between educational level and annual income of respondents, chi-square test is used and result is given below.

HYPOTHESIS

There is no significant relationship between educational level and annual income of respondents

TABLE 2

CHI-SQUARE

Factor	Calculation value	Df	Table value	Remarks
Educational level	9.091 ^a	9	16.92	Accepted

INTERPRETATION

It is clear from the above table show that, the calculated value of chi-square at 0.05% level is more than the table value. Hence the hypothesis is accepted.

So there is no relationship between educational level and annual income of the respondents.



FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- Majority of the respondents are male (67.5 %).
- Majority of the respondents are married (55.0 %).
- Majority of the respondents are both 15-20 and 20-25 years (32.5%).
- Majority of the respondents have no formal education (40%).
- Majority of the respondents are both self and public employees (35%).
- Majority of the respondents earn 5000-10000 (41.7%).
- Majority of the respondents are purchase once a week (39.2%)
- Majority of the respondents are need a change in price reduction (37.5%).
- Majority of the respondents are hear to receive green certification (45%).
- Majority of the respondents are like eco-friendly products (69.2%). □ Majority of the respondents are agree eco-friendly products and its relative sites (31.7%).
- Majority of the respondents are agree to change to greener life style (29.2%). □ Majority of the respondents are agree to recommend eco-friendly products to my friends (35.8%).
- Majority of the respondents are agree to buying eco-friendly products give me more satisfaction (30%).
- Majority of the respondents are agree in lack of awareness of the eco-friendly products.
- Majority of the respondents are strongly agree in high price (33.3%). □ Majority of the respondents are agree in unavailability of the eco-friendly products (29.2%).
- Majority of the respondents are agree in green washing of the products (28.3%).
- Majority of the respondents are don t face a problem in this products (60.8%).
- Majority of the students are satisfied with this product (77.5%).

CHI-SQUARE ANALYSIS

- So there is no relationship between educational level and annual income of the respondents.

- So there is no relationship between gender and annual income of the respondents.

RANK ANALYSIS

- Economically are ranked I by the respondents.

WEIGHTED AVERAGE

- The highest mean score is 4.141 for the lack of awareness.

SUGGESTIONS

- As observed from the research, a high level of environmental conscioussness in terms of knowledge and concern, could transform an ordinary consumer into a green consumer.
- Communication strategies for the purpose of spreading environment knowledge and creating environmental concern need to focus on the educational background of the target group than considering the other demographic variables. □ Product information dissemination for eco-friendly goods may consider that word of mouth was found to be the most important source of awareness about ecofriendly goods.
- The psychographic variables like environmental concern, attitude, intention, behaviour and influence might be taken into account by the marketers and policy makers in their efforts to turn the non-green consumers into green consumers.
- Promoters of eco-friendly goods have to generate new ideas and avenues in cost cutting and price reduction as high price was observed to be the most important barrier restraining most of the consumers from going for such products.

CONCLUSION

Sustainability is the joint responsibility of government, producers and consumers. Consumers may adopt sustainability practices in their day-to-day life by showing their preference towards eco-friendly products. However, the complex and erratic behaviour of consumers pose challenges to the government and producers in addressing their issues and fulfilling their needs. In this context, this research was undertaken to understand the consumer awareness, attitude and purchase behaviour towards eco-friendly goods in the district of Coimbatore.



BIBLIOGRAPHY

BOOKS

PRINCIPLES OF ECONOMICS

-Alfred marshal

UNDERCOVER ECONOMICS

-Steven . d

NEWS PAPER

THE HINDU

INDIAN EXPRESS

WEBSITES

- www.google.com
- www.ecoproducts.com



AN ENHANCED METHOD OF LIVER LESION DETECTION USING DEEP NEURAL NETWORK, WATERSHED TRANSFORM AND GAUSSIAN MIXTURE MODEL TECHNIQUES IN MR IMAGES

A.BathshebaParimala¹, R.S.Shanmugasundaram²

¹ResearchScholar, Vinayaka Missions Research Foundation, Salem

²Professor, Vinayaka Missions Kirupananda Variyar Engineering College, Salem

Article DOI: <https://doi.org/10.36713/epra7055>

DOI No: 10.36713/epra7055

ABSTRACT

Cancer of the liver is one of the leading causes of death all over the world. Physically recognising the malignancy tissue is a difficult and time-consuming task. In the future, a computer-aided diagnosis (CAD) will be used in dynamic movement to determine the precise position for care. As a result, the primary goal of this research is to use a robotized approach to precisely identify liver cancer. *Methods:* In this paper, we suggest a new approach called the watershed Gaussian based deep learning (WGDL) strategy for accurately portraying malignant growth sores in liver MRI images. This project used a total of 150 images to build the proposed model. The liver was first isolated using a marker-controlled watershed division scale, and the malignancy-induced injury was then divided using the Gaussian mixture model (GMM) algorithm. Different surface highlights were removed from the sectioned locale after tumour division. These jumbled highlights were fed into a deep neural network (DNN) classifier for a computerised classification of three types of liver cancer: haemangioma (HEM), hepatocellular carcinoma (HCC), and metastatic carcinoma (MET). The following are the outcomes: Using a Deep Neural Network classifier and an unimportant approval deficiency of 0.053 during the characterization period, we were able to achieve a grouping precision of 98.38 percent at 150 ages. The system in our proposed approach is suitable for testing with a large data set and can assist radiologists in detecting liver malignant growth using MR images.

KEYWORDS: computer-aided diagnosis (CAD), watershed Gaussian based deep learning, Gaussian mixture model, hepatocellular carcinoma, metastatic carcinoma, Deep Neural Network classifier

INTRODUCTION

Malignant development of the liver is a common cause of death all over the world. Computed tomography (CT) images may be used to precisely identify the harmful tissue [1]. Computer-aided diagnosis can be used for the arrangement of liver disease in the image processing approach to assist the clinician in complex interaction [2]. Image processing and artificial intelligence approaches have potential in research applications for effective characterization of liver malignant development. There are a few algorithms for detecting liver tumours that include district-based approaches, watershed improvement, and an AI approach. For

successful order of liver tumours using GLCM based highlights, a mechanised approach based on CAD structure has been accounted for [3]. Huang et al. [4] proposed a CAD-based diagnosis method for portioning and ordering liver tumours inside non-upgraded CT images. They used auto-covariance surface highlights to group the tumour with an accuracy of 81.7 percent in their augmentation work [5]. Centered on a molecule swarm enhancement process, Ji et al. [6] proposed an important computational model for the clinical diagnosis of hepatocellular carcinoma. To detect liver malignancy with greater precision, a novel and efficient improved approach based on event streamlining (IO) and SVM has been accounted for [7]. In CT images, Li et al. [8]



used an edge-based distance regularised level-set assessment approach that effectively segmented the pimple, tumour, calculi, and normal liver. In CT images of section liver tumours, a multi-channel fully convolutional network (MC-FCN) model provides better accuracy [9]. In AI approaches, the GLCM and other element extraction procedures are used to obtain observable highlights. [nine] The existing state of division approaches focused on clinical liver images is presented in this paper. Similarly, this paper focuses on various division and arrangement approaches that have been suggested to diagnose a variety of liver diseases. (#14)

2. METHODS

Watershed Gaussian based deep learning (WGDL) procedure is a proposed CAD model that uses force-based division to accurately describe malignant growth injury in CT images of the liver. The liver was separated from other mid-region organs using the watershed division, and the disease tissue was divided using the Gaussian mixture model (GMM). To distinguish HEM, HCC, and MET types of liver tumours, the eliminated observable, textural, and geometrical highlights were arranged using a DNN classifier. 2.1.1.

3. DATASET

The imaging centre of IMS and SUM Hospital in India provided a total of 225 CT images of liver malignant development. These were taken from 75 patients (50 males and 25 females) with hemangioma (HEM), 50 patients (25 males and 25 females) with hepatocellular carcinoma (HCC), and

25 patients (15 males and 10 females) with metastatic carcinoma (MET). The images were taken on a GE clinical platform CT examine machine with segment thicknesses ranging from 0.5 to 1.5 mm with the target of. The investigation was carried out on a PC with an Intel (R) center-based processor and 8 GB RAM, running MATLAB 2015a.

4. FLOW CHART FOR PROPOSED MODEL

4.1 Segmentation

The affected sections are fragmented using an area-based division process. The 3D-CNN algorithm is used to arrange and characterise Liver 3D-CT and 3D-US images separately. The results are then analysed, and it is discovered that 3D-CT is more accurate than 3D-US. TensorFlow and Python's Keras are used to implement the proposed model[15].

4.2. Watershed transform

The Watershed transition is a topography-based division algorithm based on the concept of topography [11, 12]. The grayscale images are interpreted as spatial alleviation in this algorithm, with a neighbouring least regarded as a catchment cup. When water overflows, it creates a boundary and forms a watershed. This process resulted in a complete image division. The image structure is obtained using the morphological operation. The structure clamour and various objects from the grayscale image are often smothered by this operation. For a smooth structure of the limit, we used watershed change on the inclination picture.

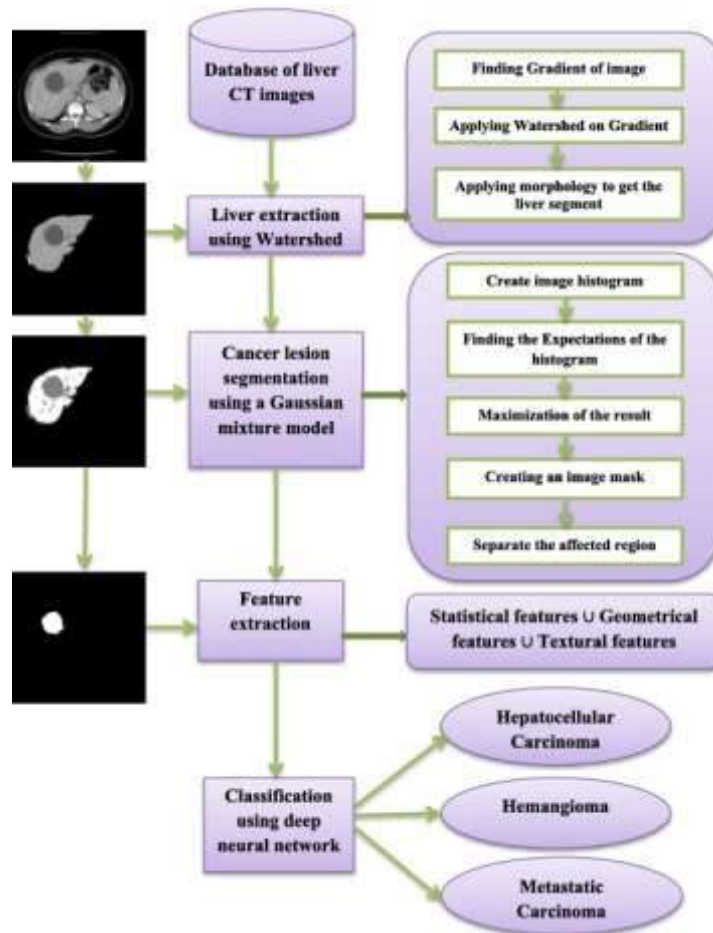


Fig 1 Flow chart

4.3. Gaussian Mixture Model

The image is presented in the context of a system in which each part addresses one pixel. The image pixels are treated as a random variable in the Gaussian mixture model (GMM) [13], and are represented by the variable x , which refers to a three-dimensional variable with RGB values. A weighted amount of Gaussian dispersion by (5) is used to resolve the image's probability, where k is the absolute number of districts and the set is the set of

loads that satisfy the condition. The term refers to the i th area's Gaussian conveyance with the mean and standard deviation, respectively. (6) To evaluate GMM, we must first determine the model's parameter. The greatest likelihood assessment is the most commonly used method for determining the GMM parameter. The assessment's main goal is to increase the likelihood of the GMM dataset. For evaluation, the expectation boost (EM) algorithm is used.

5. EXPERIMENTAL RESULT

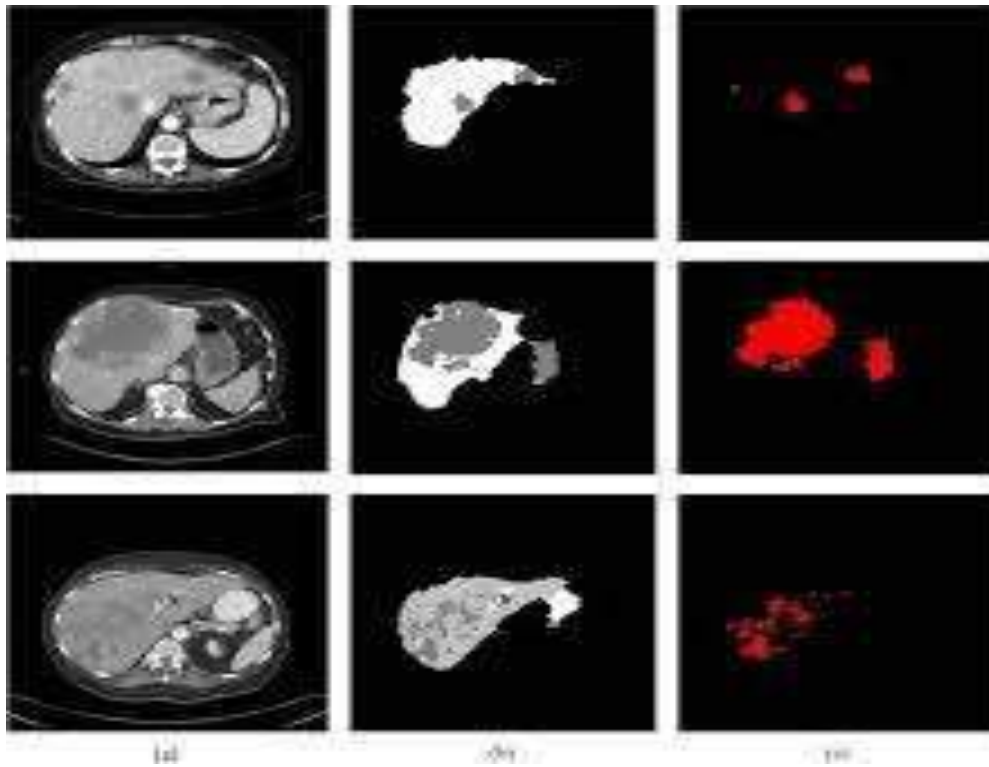


Fig 2. Deep learning based Liver cancer detection

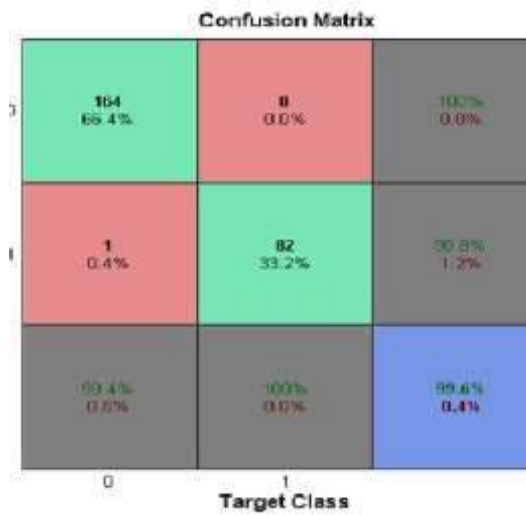


Fig 3 Confusion Matrix

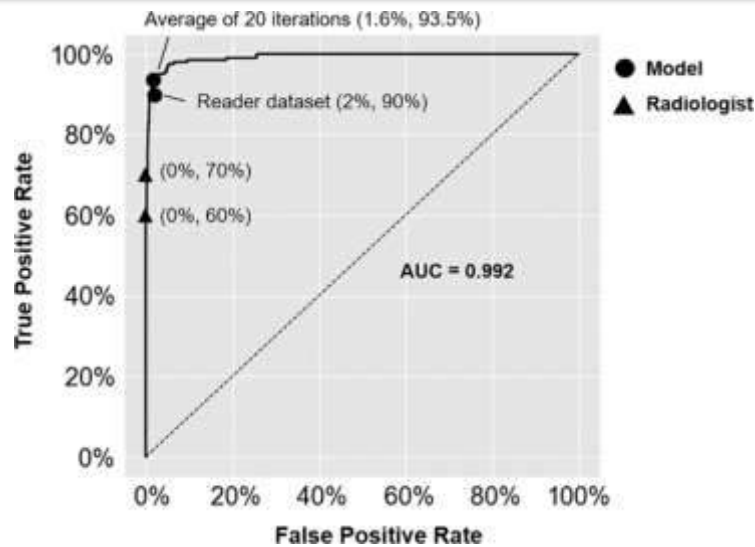


Fig 4. Deep Learning For Liver Tumor Diagnosis

6. CONCLUSION

Another technique for the programmed identification of liver tumours in CT images is discussed in this paper. To reliably detect disease injury, this approach uses a marker-controlled watershed shift and a Gaussian mixture model. The proposed algorithm has been validated using a consistent clinical dataset collected from a variety of patients in a clinical setting. The primary advantage of this robotized detection method is that it achieved the highest accuracy of 99.38 percent by using a deep neural network classifier with minor approval misfortune. The first use of the DNN model in a detection measure is in the detection of liver tumours. As a result, the proposed approach is an efficient method for detecting the malignancy locale from CT images of the liver, which will be useful in clinical diagnosis and complex interaction for early diagnosis of indications. The work's fundamental limit is the calculation of the volumetric size of the injury, which can be shaped by creating a 3-D cross section structure from various picture cuts.

7. REFERENCES

1. C. Bartolozzi, S. Ciatti, and E. Lucirelli (1981). In the assessment of central liver disease, ultrasound and computer tomography are used. 545-548 in *ActaRadiol*.
2. I. Kononenko (2001). Artificial intelligence for clinical diagnosis. Best of class and perspective in history. 89-109 in *ArtifIntell Med*.
3. Chen, E., Chung, P., Chen, C., Tsai, H., and Chang, I. Chen, E., Chung, P., Chen, C., Tsai, H., and Chang, I. (1998). A demonstrative system for CT liver image classification that has been programmed. 45,783-94 in *IEEE Trans Biomed Eng*.
4. Y. Huang, J. Chen, and W. Shen (2004). In nonenhanced CT images, computer-aided diagnosis of liver tumours. 9, 141-50 in *J Med Phys*.
5. Huang, Y., Chen, J., and Shen, W. Huang, Y., Chen, J., and Shen, W. (2006). Surface investigation of non-improved computed tomography images to diagnose hepatic tumours. 713-20 in *AcadRadiol*.
6. Z. Ji and B. Wang (2014). Using a PSO-based various levelled include selection algorithm, distinguishing possible clinical conditions of hepatocellular carcinoma. 1-12 in *Biomedical Research International*.
7. H. Jiang, R. Zheng, D. Yi, and D. Zhao (2013). Centered on CPSO-SVM and IO, an epic multi-occurrence learning method for liver disease recognition on stomach CT images. 1-10 in *Comput Math Methods in Medicine*.
8. C. Li, C. Xu, C. Gui, and M. Fox (2010). The implementation of distance regularised level sets and their application to image division. 3243-54 in *IEEE Transactions on Image Processing*.
9. Sun, C., Guo, S., Zhang, H., Li, J., Chen, M., Ma, S., Jin, L., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X., Liu, X. (2017). CT images based on FCNs were upgraded by programmed division of liver tumours from multiphase differentiation. 58-66 in *ArtifIntell Med*.
10. R. Haralick, K. Shanmugam, and I. Dinstein (1927). Image characterization with textural highlights. 3,610-21 in *IEEE Trans Syst Man Cybern*.
11. Z. Hu, J. Tang, Z. Wang, K. Zhang, L. Zhang, and Q. Sun (2018). A research on deep learning for disease detection and diagnosis using images. *Example Recognition*, vol. 83, no. 134, pp. 134-149.
12. H. Masoumi, A. Behrad, M.A. Pourmina, and A. Roosta (2012). An iterative watershed algorithm and artificial neural network were used to programme liver division in MRI images. 429-



-
- 437 in *Biomedical Signal Processing and Control*.
13. A. Chattaraj, A. Das, and M. Bhattacharya. 13. Chattaraj, A., Das, A., and Bhattacharya, M. (2017). Marker-controlled watershed algorithm divides mammographic images. 1000-1003 at the *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*.
 14. R. S. Shanmugasundaram, A. Bathsheba Parimala *Medical Image Processing was used to assess the classification of liver disease. Volume 8 Issue 5 of the International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, January 2020*
 15. AN ENHANCED LIVER STAGES CLASSIFICATION IN 3D-CT AND 3D-US IMAGES USING GLRLM AND 3D-CNN, by A. Bathsheba Parimala and R. S. Shanmugasundaram. *Volume 12, Issue 2, February 2021, pp. 171-184, Article ID: IJEET 12 02 016. Global Journal of Electrical Engineering and Technology (IJEET) Volume 12, Issue 2, February 2021, pp. 171-184, Article ID: IJEET 12 02 016.*



KUPKARI IS A GAME OF HEROES

Ikhtiyor Jalilov¹, Faxriddin Rahmonov²

¹Karshi SU researcher,

²Karshi SU associate professor, candidate of historical sciences

ABSTRACT

This article describes the traditions and ceremonies of the Uzbek people in connection with the traditional games of ulak-kupkari on the basis of existing literature and field records.

KEY WORDS: *Uzbekistan, Kashkadarya, Surkhandarya oases, kupkari, goat, horse, rider, game, spectacle, tradition, ceremony.*

The Kupkari horse has been serving man since ancient times. According to ethnographic data, the horse was tamed about three thousand years ago. There are more than two hundred breeds of this animal in the world.

The horse is strong, patient, graceful, clean, alert, alert, able to see, smell, smell, and even perceive an unknown ghost. There are many legends of our ancestors about the horse, which is a faithful companion of man. They emphasize the unique importance of the horse, its unique character and virtues, and what to pay attention to when choosing a horse. Proverbs such as "Horse is a young man's

wing", "Get up early, see your father first, then see your horse", "When you have a father, you know the people, when you have a horse, you know the country."

The unique masterpieces of Uzbek folklore - epics such as "Alpomish", "Gorogly" - also give the horse positive qualities and praise. According to historical records, equestrian games existed in the time of Alexander the Great. According to folk epics such as "Alpomish", "Gorogly", "Manas", "Forty Girls", horse games have long existed in the ancient ancestors of the Turkic peoples.



It is obvious that the image of the horse has a strong place in the literature and art of the East

since ancient times. In these animal epics, Girkok was revered as Boychibor, and songs, poems, and



people sang. Artists engraved the image of the horse on ceramic vessels, murals, and rock carvings.

The holy hadiths of Islam say: "Goodness is bound to the horse's ways until the Day of Resurrection. The horse is for three different jobs. One is reward, one is veil, and one is sin. The reward is that if a person feeds him in the pasture or in his house in the way of God, he will be rewarded. If he ties it in the pasture or in his garden to graze, the rope will be blessed until it reaches the place where the rope reaches. If he breaks the rope and leaves one or two passes, he will be rewarded for his footprints and rubbish. If he runs away and drinks water from a river, he will be rewarded for it. If he has not forgotten the right of God to take care of him and ride him so that he will not get rich and tired, this horse will be a curtain from hell for him. If a person feeds his animal for pride and hypocrisy and for acting against the believers, he will be punished for it" [1:90].

Chapter 25 of the *Nightmare of Kaikovus*, one of the literary masterpieces of the 11th century, is entitled "Chahorpoy in the Remembrance of the Purchase of a Horse." will be.

It is said that the world is made up of man and that man is made up of animals. The best part of the animal sentence is the horse. To hold him sacred is both kadhudism and mercy. It is said in the parable, "Take good care of your horse and its clothes, so that the horse and its clothes will take good care of you" [2: 78-79].

The peoples of Central Asia have long been famous for their racehorses. Akhal-Teke is widespread in the mountains of southern Tajikistan, yammut in western Turkmenistan, lakai in the mountains of southern Tajikistan, Khojand in northern Tajikistan (now Sughd region), Karabayir, lakai and Arabian horses in Uzbekistan and Karakalpakstan. From ancient times, Uzbeks bred mainly Karabay, Lakay, Turkish and sometimes Arabian horses [3:27].



Horses of Karabayir breed are widespread in Zarafshan, Fergana valleys, Tashkent oasis. The origins of this breed go back to ancient times, when the local breed was mixed with Turkmen, Arab and Mongol breeds. The Uzbeks mixed this breed and formed Uzbek, Miyankoli and Urgut breeds.

Laqay breeds, as mentioned above, are strong, fast horses bred in the TOF and foothills of Uzbekistan and Tajikistan. Arabian horses are widespread in the Zarafshan basin, Bukhara and Karshi oases. These horses were strong enough to walk in the desert for several days [4:20].

Turkmen horses are bred in the lower part of the Zarafshan oasis, in the Nurata district, in the south-western districts of Khorezm and Surkhandarya regions. Turkmen stallions are very good at riding and riding.

It is not for nothing that our people say, "A horse is a young man's wing." Strong, brave,

energetic young men understood the "language of horses" and grew up to be riders. El paid homage to the riders, adding the word rider to the name of the famous: Omon rider, Ergash rider, etc. [5].

Kupkari (in Kyrgyz it is called "qok pari", in Tajik it is called "bozkashi") and means "blue wolf". In ancient times, nomadic Kazakhs and Kyrgyz chased wolves on horseback until they were exhausted. This required the rider to be resourceful, agile, and the horse to be resourceful. This is one of my favorite games. It is widespread among Uzbeks and other peoples of Central Asia. In Uzbeks, this ancient horse game is also called "uloq".

In our people, when a son is born, at the hair and circumcision weddings of their children, sometimes when they are married, soup is given to the people, and at the end a kupkari is organized.

On Navruz, there is always a kupkari. It was attended by villagers with horses, and riders from



remote villages were also invited. Those who did not have horses participated as spectators or supporters of the rider.

Kupkari is also a combination of the most complex movements and special exercises performed on a horse. The rider participating in this horse race had to be well-trained, strong-willed, agile, and agile in every way.

The rider's horse must also be very resourceful, energetic, well-trained, able to break through quickly when riding a herd of horses, understand the owner, and fulfill all requirements and actions. As long as the rider and the horse justify each other's trust, many prizes will be won, and the rider's fame will increase.

Kupkari is a rider's struggle to win by fulfilling the conditions of a race on horseback. It is a one-on-one debate. The main condition of the competition has been put forward. The body of a kid is tied to the rider's saddle by the number of squirrels, squeezed between the hooves, and thrown to the designated address or to the head referees, sometimes at the far end of the circle. The cousins, who are relatives, worked together to win the prize.

In the past, Uzbeks had one horse in every household, and the rich had three or four horses. Horse owner or special riders hired and ridden kupkari. This game is usually held in late fall or winter. To prepare for it, the horses were fed separately from early spring. How to raise, care for, and cool a goat after a kopkari was done by a specially qualified person ("sayis") or the owner of the horse. Riding has been passed down from generation to generation. Horses are protected from heat and cold, are constantly tied up, are not overloaded, and are protected from prying eyes.

In the past, weddings and spectacles did not take place without many, of course, the stallions in Kupkari were specially bred from thoroughbred horses, and the foals were specially cared for at a young age. Horses were first trained to be ridden by younger children, and finally, when they grew up, the rider rode. The horse was cooled (rested) from time to time, and did not ride in vain. Initially, the horse was included in the herd and used in kupkar after being chopped and cooled at the edges of the circle. The news about Kupkari was delivered a week - ten days ago. Long - the riders, who had been invited from afar, arrived the day before the kupkar, and the horses were chilled, but not fed and given much

water. After eating soup and circumcision on the wedding day, the horsemen went to the place where the kupkari would be. Wide ridges and hills have been selected for the game. There are 200-300 and more riders in Kupkari. They were followed by their relatives and relatives in a certain place.

Ҳар бир қишлоқда кўпқарига раҳбарлик қиладиган баковулбоши бўлган. Одатда, қишлоқ оқсоқоли ёки энг ҳурматли киши бу ишни бажарган. Баковулбошига икки баковул ёрдам ҳам берган.

Баковулбоши ва ёрдамчилар, оқсоқоллар тўйнинг энг ҳурматли меҳмонлари маълум баландликда ёки тахтадан қилинган жойда - чорпоя (ҳавоза) да кўпқарини бошқариб ва кузатиб турганлар.

Одатда, отлар ва чавандозларни майдонга кириш олдидан қизитиш учун "Қоқма" ўйини уюштиришган. Ўртага навбат билан икки - учта улоқ ташланган. Улоқ 6-8 ойлик ёки бир ёшгача бўлган эчки боласи ҳисобланган. Чавандозлар уни тўдадан олиб чиқишга интиланлар. Бунга эришган чавандозгина шу улоқни олган. Баъзан улоқ чавандозлар орасида бўлиб олинган. Қоқма 1, 5 - 2 соат давом этиб соврин берилмаган. Қоқма тугаб, отлар совутилгач, асосий ўйин - кўпқари бошланган.

Кўпқарида тўй эгаси иқтисодий аҳволига қараб 6-8 ойликдан бир ёшгача бўлган серка, такалар, баъзан 6-8 ойлик новвос ҳам ташланган. Серка ёки ёш такани сўйиб, калла ва туёқлари ҳамда ички аъзолари олиб ташланади. Улоқлар чортоқнинг олдида сақланган.

Дастлаб баковулбоши совринларни эълон қилган, сўнгра ғолиб чавандозларга навбатма-навбат тарқатилган, баковуллар эса чавандозлар ўртасига улоқни ташлаб кўпқарининг боришини назорат қилиб турганлар. Ғолибларга соврин сифатида қорамол, кийим - бош, гилам, пул ва бошқа қимматбаҳо совғалар берилган. Этнографик кузатувларимизга кўра, Қашқадарё воҳасининг қўйи туманларида Деҳқонобод кўпқарилар улоқ баландлик ("ҳавоза") дан туриб чавандозлар устига ташланади[6].



In the high mountainous areas of the oasis, a kid is taken to the center of the place where it is located. But in both cases, the rider must skillfully pull the kid out of the middle in order to win the prize, leaving the other riders behind and bring him to the designated place or in front of the captain.

In the havoza (chartak), two auxiliary bakuls grab the kid's legs and throw them to the lower herd. The riders skillfully take the kid out of the herd and carry it to the designated place. In the contest for the kid, the riders, who were strong and strong, were accompanied by his friends and relatives, who helped to protect them from their rivals. For example, the riders of the Qatagan tribe in the Kashkadarya oasis defended each other. The seeds in the oasis, such as mangit, bell, gourd, and palace, also supported each other in the process of kupkari. Sometimes, in the event of a dispute or quarrel, the elders reconciled the parties. [7]

If the rider took the kid out of the herd and took it to the designated place in the circle, the captain gave him a predetermined prize called "halal". Otherwise, whoever violates the rules in the contest of a goat, and takes a kid in a hurry, is considered "haram" as a violation of this tradition. No prize was awarded to the rider at this time. When taking a kid out of the herd, the kid may fall to the ground or be pulled by two or three people. The skill of the rider, the violence of the horse, is thus tested. The rider had to use various courageous methods with endurance.

In many cases, the riders wore special clothing: telpagi, outerwear jomakori - ("jomoykor") pants and boots. The riders took care of the horse, never hit the horse on the head, did not sew on a strong herd, only gently hit the saddle when necessary. From time to time the horse was kept cool.

In Kupkari, the body of a goat that had been discarded over and over again was taken by the victorious riders. A new kid was thrown into the circle, and Abjir riders won 2-3 and more prizes. Only then did the racehorse become more popular and more expensive.

Kupkari also ended with the distribution of the announced pedigree prize. The riders cooled their horses, heard when and in which village the next game would take place, and dispersed with their relatives. Horse owners and riders distributed the prey goat to their close relatives or gave a feast the next day, and sometimes the prizes were also distributed to the older riders.

Kupkari was a game of peace and tranquility, which played an important role in educating the young men to be courageous and energetic. Harvesting has been going on all winter since the harvest - in late autumn. During the spring holiday of Navruz, kupkari is especially hot. Then the horses were reared in a special place - a "kennel".

So, in Kashkadarya, one of the southern regions of Uzbekistan, kupkari has been the most interesting national game. Nowadays, at large weddings, valuables, carpets, motorcycles, horses, rams, camels, etc. are presented as prizes. That is why the competitions between the riders are very sharp and interesting.

REFERENCES

1. *Examples of hadiths on morality. T., 1990.*
2. *Kaykovus. "Kobusnoma." T., 1986.*
3. *Samibekov R. The rider's belt. T., 1998.*
4. *Yuldashev S., Jo'raev N. "Ulak" is a game of brave and courageous riders. Fergana, 2002.*
5. *Field records. Kashkadarya region, Kasbi district, 2020.*
6. *Field records. Kashkadarya region, Dehkanabad district, 2021.*
7. *Field records. Kashkadarya region, Kasbi district, 2020.*



THE ROLE OF JOYBAR KHOJARS IN THE SOCIO-POLITICAL LIFE OF THE BUKHARA KHANATE DURING THE SHAYBANIYAN PERIOD

Saidova Charos

Student, Karshi State University

ANNOTATION

This article describes in detail the role and importance of the Joybor Khojas in the socio-economic and political life of the country during the reign of the Shaybanids, their history of origin, a summary of the lands they owned, their contribution to the development of economic life and active involvement in the Bukhara political process.

KEYWORDS: *Shaybani dynasty, Joybor sheikhs, Ubaydullah, Khoja Muhammad Islam, political struggle, Abdullah II, religious leader, inheritance, land, Temurhoja, sarkor, financial office.*

DISCUSSION

After the conquest of Movorounnahr and adjacent territories by Muhammad Shaybanikhan, the Timurid dynasty was abolished. The Shaybani dynasty, which came to power, was supported from the earliest times by merchants, poor peasants, and clerics who suffered from the civil wars of the Timurids. Although the country was reunited, it was not fully stable, and popular uprisings continued.

From the Shaybani dynasty to the time of Ubaydullah, the political and socio-economic life of the country has significantly improved. The influence of the Joybor lords, especially the sheikhs, in the domestic politics of the country increased even more. Representatives of mysticism such as Joybor Khojas in Bukhara, Qasim Sheikh Azizkhan in Karmana, Sheikh Khudoydod Vali in Samarkand[1]. Especially during this period, the power and authority of the masters of Joybor was higher than that of other clergy. They also began to play a key role in local government. Although the main power was in the hands of the central government, the khan continued to rely on them to maintain the integrity of the country.

The sheikhs of Joybor are representatives of the Naqshbandi sect. Their naming of Joybor Khojas is due to the fact that the grandfather of Khoja Muhammad Islam, Khoja Muhammad Yahya, moved to a place called Joybor in Bukhara. They considered themselves the descendants of Imam Ali Murtaza, who came from Mecca to Nishapur and from there to Bukhara to propagate Islam.[2]. Hodja Muhammad Islam and his descendants bind themselves to the

descendants of the Prophet Muhammad on the paternal side and to the descendants of Genghis Khan and Joji on the maternal side in order to show that they are the descendants of nobles and governors. In the book "Ravzat ar-Rizwan", which gives a full biography of Hodja Muhammad Islam and especially Hodja Sa'd, the genealogy of Hodja Sa'd is as follows: Hodja Muhammad Sa'd - Hodja Muhammad Islamho 'ja Ahmadhoja - Yahya - khoja Muhammad Islam - khoja Tahir - khoja Muzaffar - khoja Alouddin - Mujiddin - khoja Zahiriddin - Imam Abubakr Ahmad -hoja Sa'd - khoja Zahiriddin - Imam Husayn - Ali ibn Abu Talib[3].

As for the early period of their political activity, the lords began to be appointed to important positions in the country from the time of the Samanids. They have risen to such high levels as Naqibal-Nukabo and Shaykh al-Islam. According to Sa'diya, Imam Abu Bakr Ahmad was called a naqibal-nukabo by Halokuhan, and Badriddin Kashmiri said that the whole of Bukhara was given to Abu Bakr Ahmad by Genghis Khan. Khoja Muhammad Islam and Sa'd held the position of Sheikh-ul-Islam in Bukhara in the second half of the 16th century[4].

"Muhammad Islam, the grandson of Abu Bakr, plays a key role in the economic and political influence of the masters of Joybar. He intervened in the struggle for the throne in the Shaybanid state in the 1950s and helped his disciple Abdullah II ascend the throne.[5].

Moreover, the lords not only supported the ruler but also acted as a mediator between the locals



and the khan. Serious complaints and tribal wishes were conveyed to the khan by the clergy. Abdullah II did not ignore Hodja Sa'd's request to pardon the fox tribe living in Afghanistan. The governors of the provinces, the Shaybani sultans, also had to turn to the lords for help in order to establish relations with the supreme ruler.

It is also important that the person who wanted to own the crown had to have a good relationship with the masters of Joybor first of all. After the death of Abdulaziz Khan in 1550, the ruler of Balkh, Shaybani Pirmuhammad Khan, skillfully seized power from the heir to the throne, Muhammadyar Sultan. But soon he is forced to return to Balkh, to return the throne to its owner. The reason was that he was not supported by the nobles of Bukhara, many Shaibani sultans, especially the masters of Joybor. Pirmuhammadkhan tried hard to elect Uzbekkhan as khan, but failed. One day during the month of Ramadan, after the iftar attended by His Highness Hodja Muhammad Islam Pirmuhammadkhan, Abdullah Sultan, Ibadulla Sultan, Dostim Sultan and others, Pirmuhammad Khan spoke about state affairs and pointed to the Uzbek sultan. We have a brother who is famous both in terms of age and greatness. ” Hazrat Eshan replied: “We rely more on Abdullah. Many provinces will be conquered by his hand. We advise you not to be indifferent to it either[6].”

Again, their position reached such a level that masters had the power to exert certain influence in matters such as the appointment, removal, and transfer of a person to a higher position. A. Jenkinson, an English traveler, visited Bukhara in 1559 and said about the Joybor lords, who were the leaders of the priests here: “There is a religious leader in Bukhara. He is listened to more than the king, he can voluntarily remove the king and put another[7].”

In the social life of the country, the masters of Joybor soon became rich due to their great position, the income of the foundation, and the donated lands. They owned large tracts of land, hundreds of slaves, many livestock, irrigation facilities, and commercial establishments. They also had innumerable herds, craft shops, teams, mills, baths, and caravanserais in the big cities. Those who earned a large income from it every year[8]

They also made a lot of money by donating grain and agricultural products, which are stored in many of their warehouses in Movorounnahr and Khorasan. These products have increased due to the "special generosity" of large landowners, governors, Shaybani sultans. “In addition, according to manuscript sources, the masters were also actively involved in international trade. For example, Jonmuhammad and Yormuhammad as special representatives of piety, they said, and the pretense

Din Hasan's at the head of a trade caravans Kazan, Muscat, sweet, Jiddah in other cities of Kashgar, were attending ⁸”

It should also be noted that the masters had special representatives in rural and large cities. Their main task was to purchase land for new land and water facilities, as well as to constantly monitor the price and quantity of land sold and deliver it to the owners. When allowed, they were purchased and hired to hire a laborer to begin redevelopment. In Samarkand, Temurkhoja was engaged in such work, and with his help, Khoja Muhammad Islam Khoja bought some of the property of the descendants of Ubaydullo Ahror. According to Muhammad Talib, his father (Hodja Tajiddin Hasan) strictly instructed his commanders not to be aware of the sale of land and property anywhere.[9].

Owners of such large estates allowed marriage between the offspring of one father in order to prevent the division of the property under their control, and the inheritance was largely left to one son. Hodja Muhammad Islam bequeathed all his property to his eldest son Hodja Sa'd by depriving him of two sons: Hodja Bahauddin Umar and Hodja Muhammad Qasim, and the will was confirmed by the khan.

Their lands were so large that a special administrative apparatus was developed to manage it. This meant that there was another authority within the khanate that was subordinate to him.

The owners set up their own personal offices, the office, that is, the financial offices that controlled all the property. The office was staffed by officials such as an accountant and an editor (secretary). There were also a number of positions, such as kushbegi, miroxur, mirishikor, mushrif, qazi, bakovul, kerek yarachi. The nomadic tribes subordinated to the lords were ruled by a special official - a doruga. It is clear from this that the Joybor lords had formed a governing body similar to a certain style of government, which in turn testified to their power and position in the socio-political life of the country.

The masters of Joybor also paid special attention to the beautification of the country. In turn, they made riches by using it more productively. From 1557 to 1579, gray lands such as Somonchuk, Afshona, Sevinchi kalon were developed. Canals were dug in Chorjoi, Merv and Vakhsh. The ruler created all the conditions for this, in particular, the decree of Abdullah II to the governors of Gissar, Denau and Qabodiyon. "She is OK. Our word is Abulgazi Abdulla Bahodirkhan. With the receipt of this decree, the dignitaries, citizens and citizens of Gissar, Denau, Qobodiyon regions, and the provinces living in the city of Safa, to separate, to take care of its representatives, not to violate this decree and not



to allow any shortcomings in this work. The Friday of 993 ended in the month of ul-awwal[10] ”.

They were given such a concession that they were exempted from the taxes paid by the natives, and this was confirmed by law. This is especially evident during the reign of Abdullah II. One of his decrees states that the property, nomadic villages and arable lands located in Marvi Shahijahon province will be inherited by Khoja Kalonga and exempted from all taxes.

In conclusion, it can be said that the masters of Joybor took an active part in the socio-political life of the country in the 16th century. During the Shaybanid period, the position of the clergy reached an extremely high level, and the central government also relied on them in expanding its sphere of influence. The direct and indirect interference of the masters of the Joybor in the internal affairs of the country was officially supported. This was especially the case in the domestic policy of Shaybanikhan, Ubaydullah and Abdullah II. One of the reasons for Sheibanikhan's coming to power was the support of this layer. Although the country was not secularly developed and was divided into small khokimiyats, the popular uprisings were suppressed to a certain extent, a unified state was formed, and the need for land on farms was met to a certain extent. Of course, all this was the result of the efforts of the masters and their help to the ruler.

REFERENCES

1. *Kandakharov A. Activity of sheikhs of Karmanalik. Tashkent. 2018. "The Wing of Thought". Page 34*
2. *National Encyclopedia of Uzbekistan. Volume 3. Tashkent. 2002. State Scientific Publishing House, p. 645*
3. *Ahmedov B. Lessons from history. Tashkent. 1994. The Teacher, page 26*
4. *Ibid., P*
5. *National Encyclopedia of Uzbekistan. Volume 3. Tashkent. 2002. State Scientific Publishing House, p. 646*
6. *Ahmedov B. Lessons from history. Tashkent. 1994. The Teacher, page 33*
7. *National Encyclopedia of Uzbekistan. Volume 3. Tashkent. 2002. State Scientific Publishing House, p. 646*
8. *Ahmedov B. Lessons from history. Tashkent. 1994. "Teacher." Page 30*
9. *Ibid., P. 31*
10. *Ibid., P. 31*



OCCUPATIONAL COMPETENCY CRITERIA OF TEACHERS IN PROFESSIONAL DEVELOPMENT AND THEIR ROLE IN THE PROFESSIONAL ACTIVITY OF TEACHERS

**Saidmuradova Sitora Nabijonovna¹, Djamilova Latofat Omonovna²,
Imomov Chorshami Mamatalievich³**

¹Department of Emergency Situations of Surkhandarya region Methodist-teacher of the Life Safety Training Center

²Department of Emergency Situations of Surkhandarya region Teacher of the Life Safety Training Center

³Department of Emergency Situations of Surkhandarya region Teacher of the Life Safety Training Center

ANNOTATION

In this article, scientific information on the criteria of professional competence of teachers in professional development, different scientific approaches to them, views, the role and importance of professional competence criteria in the professional activity of teachers, as well as the level of influence of professional competence of the teacher on the development of the personality of the pupil, his educational activities, the requirements

KEYWORDS: *Professional competence, special competence, methodical competence, social intelligence, communicative criterion, cognitive component, tolerance, empathy, nurturing, collaboration, tolerance, fascination, creative teacher, art.*

DISCUSSION

Today, the role of teachers in educational institutions in the process of education and training is becoming more complicated day by day, and the requirements for education in this regard require higher qualification from teachers. In modern schools, the requirements for the education of the teacher and his professional activity are dictated by the development of strong knowledge and skills. Such skill in the teachers of an educational institution should be clearly manifested in their professional dignity and abilities, that is, in their professional competence. In this regard, as in all other educational institutions in our country, educating teachers on the criteria of professional competence in professional development should be considered as an urgent problem. Professional competence of teachers is always manifested in the direction of pedagogical activity – predicate-informative, active-

communicative, valuable – professional competence as an integral characteristic determines the ability of the teacher in the professional development to obtain echo using the life experience and values, knowledge and skills of professional duties in real situations that arise in the professional pedagogical activity. The nature of professional competence is characterized by the fact that a person manifests in his limited units associated with his life values, that is, with conditions of deep interest to the same type of activity as a person. In other words, the professional competence of the teacher in the field of professional development manifests itself valuable self-determination in relation to pedagogical activity, competence in the field of science teaching, methodical, pedagogical and psychological readiness for work in different pedagogical systems. All this is manifested in motivational, cognitive and active components, forming the basic system of



professional competence of the teacher in professional development.

However, in science there are also different views on the professional competence of teachers in professional development. N.V.Kuzmina the professional competence of the teacher is such that it embodies 5 types of criteria. They are as follows:

1. Special competence includes in-depth knowledge of the subject, experience and skills of the teacher, as well as methods of knowledge of technical and creative tasks.

2. Methodical competency. Knowledge of different methods of teaching, didactic techniques, as well as having different methods and skills of applying such techniques in the teaching process, knowledge of the psychosocial aspects of mastering knowledge and skills in the educational process, etc.

3. Socio-psychological competence requires knowledge of the skills of establishing a purposeful pedagogical relationship with students, the psychology of personality and pedagogical attitude.

4. Differential-psychological competency includes the features of determining the individual characteristics, priorities and direction of students, as well as the leading motivations of their activities.

5. Auto psychological competence is the ability of the teacher to understand the level of personal activity, abilities; to be able to see the causes of deficiencies in himself and in his work; embodies the skills of self-improvement.

The above-mentioned types of professional competence of the teacher cover the main directions of his professional and pedagogical activity.

The integral system of professional competence of the teacher in professional development consists of cognitive, motivational-valued, operational-active and socio-psychological components (Y.G.Tatur):

The cognitive component of the teacher's professional competence is formed in the process of professional education and work on itself, as well as the embodiment of a certain level of developed knowledge in itself.

The motivational-valued component of the professional competence of the teacher determines the direction of the individual's choice to the activity.

The operational-active component of professional competence includes the ability of the teacher to self-manage, make the right decisions without parallax to the antipathy, professional creativity, communicative competence and adequate professional self-assessment skills.

The socio-psychological component of the professional competence of the teacher includes the reflection of the teacher in the educational process, empathy, communication, the educational process, as well as the comprehension of the students,

determining the socialization of the teacher's personality in communication, the manifestation of the social experience of the teacher in the educational and educational process and thereby determining the

Taking into account the professional competence of teachers in the development of qualifications, its content and system, as well as the peculiarity of innovative pedagogical activity, we can say that the formation of social and communicative competence, which is one of the criteria for professional competence of teachers of the educational system, is important in the upbringing of the "basic competence of the teacher".

The importance of educating the social competence of teachers in the process of professional development on the one hand allows the teacher to have a constructive relationship with the students in the process of education, to effectively cooperate with the school team, on the other hand, to establish a dialogue with the subjects in the social life of the school.

Social competence of teachers consists of the following components: professional unity (commonality), tolerance and social intelligence.

The professional unit (generality) of the teacher is his profession, functional duties; professional values and motivations, the teacher's attitude to his profession; embodies the imagination of the teacher in the direction of norms that govern the behavior of the teacher in the quality of the manifestation of his profession.

Tolerance (patience) as a component of social competence embodies the processes of interaction with the majority in the process of carrying out multifaceted functional professional activities of the teacher, including students, their parents, collaborators, school administration. And this requires the formation of a high level of spiritual-spiritual stability from the teacher. Exactly tolerance formulate strong willpower and endurance characteristics in the trachipterid. Tolerance is one of the modern norms of the education system and the strict upbringing of the subjects of Education.

Social intelligence is also an important element of the social competence of teachers in professional development. This element is manifested in the ability of the teacher to correctly perceive the subjects of education in the educational process and be able to enter into a relationship. Pedagogical communication of teachers in professional development is not only a component of the professional competence of the teacher, but also one of the important criteria that motivates in the upbringing of this competence. A teacher who is able to communicate effectively with the subjects of the educational process, is able to achieve the desired achievements himself, guided by those around him.



The communicative criterion of professional competence of the teacher at the level of dialogue interaction includes the following:

1. The teacher must accept the student as a specific person, and not as a “pitcher”, which must be filled;

2. Form a pedagogical system, taking into account the laws of dialogic relations in the educational process of the teacher;

3. The teacher recognizes that there is a lack of management in pedagogical reality, uncertainty, inferiority when creating a dialogue environment, and in this case, he, despite all kinds of pressures, clearly identifies the points of establishing (approaching) cooperation with a child, the reader.

We consider that in the professional activity of the teacher in the process of professional training, colleagues and students, as well as in the process of communication with other subjects, must have the following qualities of the communicative criterion:

1. Transcendence-refers to the teacher's perception of himself as a source of information for others. Such a teacher is constantly in search of knowledge and is engaged in science. Also, the transcendent teacher does not prefer to demonstrate his knowledge in front of others, but rather prefers to search and find new knowledge in order to solve the problems in the educational process especially the existing problems in the students.

2. Empathy-the ability to sympathize with the students and their problems based on the subjects of the educational process. Empathy can direct itself to the student's personality to the teacher and accept it with the presence without evaluation.

3. Congruence is the level of upbringing of free and harmonious manifestation of one's own qualities and livelihoods. Such quality determines the ability of the teacher to act openly, naturally, without fear of making mistakes in any circumstances and situations. Congruence refers to the state of involvement in the professional activity of the teacher and the duties performed.

4. Constructivism not to succumb to pedagogical conflicts, to always be able to resolve pedagogical conflicts on the positive side. Conflict of the teacher makes it possible to understand the true essence of the conflict situations that occur in the educational process, to perceive different attitudes as a positive factor and developing, power in behavior.

5. Collaboration is the experience of interacting with educational entities and being able to solve problems together. A teacher of such quality can see his life in a “general” context, be able to cooperate with those around him, work in a team and see himself as an integral part of a whole being.

The communicative criterion of professional competence is also inextricably linked with

pedagogical conflicts and conjunct logical competence. Pedagogical conflicts arising in modern educational conditions do not have a negative impact on the process of education and training, but on the contrary, self-education of students, the establishment of positive cooperation with the community, the problematization of teaching. Here it is said about the teacher's conflict logical culture. The teacher's conflict logical culture is a culture of behavior in various pedagogical conflicts, the level of upbringing implies the violation of the conflict on the positive side. Conflicts between the teacher and the schoolboy, between the teacher and the parents, as well as between the teacher and the pedagogical community, are one of the biggest problems in the school. Pedagogical dispute often occurs when the teacher has an unfair opinion about the pupil. A dispute does not arise if you think positively about the child. Turning around the conflict is part of the pedagogical wisdom of the teacher. Warning of the conflict, the teacher not only retains the educational power of the team, but also creates this atmosphere (V.A.Sukhomlinsky).

There are a number of reasons for educating the communicative criterion and conflictological components of teacher professional competence:

Multiculturalism and the existence of territorial education in institutions;

The delusions of the subjects of the process of education, the existence of a worldview to the personality, to the multiplicity of Education (intolerance) and to the competition (thoughts that have settled).

Social stratification of the subject of the educational environment;

Confluence in teachers comptology, pedagogical interest inadequate study of methods and means of effective resolution of conflict processes by specialists;

Rapid changes in the educational environment, increased news flow, as well as frequent changes in the normative educational documents related to vocational activity and the lack of readiness of teachers to constantly changing educational environment,

It is difficult for teachers to adapt to the new environment at a young and so on.

Educating the teacher of the confluence of knowledge presupposes the warning and remedy of existing conflicts in the educational process, as well as the application by the teacher of conflict situations for the purposes of development.

Along with educating the Occupational competency criteria in the teachers in the professional development, it is also important to formulate the skills to create a safe learning environment in their professional activities. It is



known that the profession of teacher belongs to a group of high-threat professions. Taking this into account, the teacher can face various trifles in his professional activities.

A perfectly trained teacher of professional competence should be trained in the qualities of "safe conduct", which include the following (G.M.Kodjaspirova):

To have non-standard and non-cartesian approaches to education and training;

Freedom, Initiative, self-confidence, inner self-doubt;

(PR warning));

To be able to accept and analyze information that is against the worldview and professional principles of the educator;

Ability to critique and evaluate the professional activity experience of another person and to integrate his / her own performance;

Reflexive culture;

Ability to communicate (with the general conjugation of the conjugation component itself);

To be able to model the pedagogical process, to obtain the results of professional activity, to get the results of the pedagogical culture, to get the idea of the methodological congruence, to be able to predict the results of the pedagogical process.

To the above-mentioned descriptions – a teacher with a leading competence is able to ease the “complex work” of the student and contribute to its growth and development. In this way, the teacher is guided by the facet of the educational process (visual perception). supportive) converted (K.Radjers).

The factitive competence of the teacher consists of 5 creativity-components (art):

Art to respect;

Understanding the art of Aries;

The art of giving and supporting help is injustice;

The art of collaborating and staying ”on their own”

The teacher-fascinator is a creative person, his creativity (creativity) is constantly changing and growing.

Speaking about the criteria for professional competence of teachers in the field of professional development and its role in the activities of the teacher, it is worth noting that professional activity of the teacher is one of the integral parts of his life. Therefore, it is possible to learn, learn and determine the level of training of professional dignity of pedagogical workers who are undergoing retraining training or who are carrying out professional qualification in the first half of the year, the choice of methods, means and forms of training professional dignity, as well as their impact on the perfection of the criteria of professional.

REFERENCES

1. Муслимов Н.А. Бўлажак касб таълими ўқитувчиларини касбий шакллантириши / Монография. – Т.: Фан, 2004.
2. Муслимов Н.А., ва бошқалар. Касб таълими ўқитувчиларининг касбий компетентлигини шакллантириши технологияси/ Монография. – Т.: “Фан ва технология” нашриёти, 2013.
3. Азаров Ю.П. Искусство воспитывать: Книга для учителя. -М.: Просвещение, 1985. – 448с.
4. Болотов В.А., В.В.Сериков. Компетентностная модель: от идеи к образовательной программе. – Педагогика, №10, 2003. - С.8-14.
5. Ильенкова С.Д. и др. Социальный менеджмент. – М.: ЮНИТИ, 1998.
6. Казарницкая Т., Головина И., Каплич Л., Уварова И., Цветкова Т. Компетентность учителя: инструментарий оценки и самооценки. – Директор, 2002, №6. - С.16-25.
7. Лебедев О.Е. Компетентностный подход в образовании. - Школьные технологии. 2004, №5. - С.3-9.
8. Педагогика профессионального образования. Под ред. В.А.Сластенина. -М.: Академия, 2004.
9. Питюков В.Ю. Основны педагогической технологии. —М.: Гном-Пресс, 1999.



NATIONAL ORIGINALITY IN THE FRENCH LANGUAGE ANOMASTIC PROBLEM

Nazirova Ozoda Zohid qizi

Teacher, Tashkent State Technical University

ANNOTATION

This article gives a brief overview of anthroponyms, their functions, the status they derive from these functions, and their specificity.

KEY WORDS: *personal name assistant, speech designation, original semes, primary and secondary semiosis of a name.*

INTRODUCTION

The scope of scientific research aimed at studying the language, history, lifestyle, Customs and traditions of the peoples of the world, as well as cases of national and cultural originality is growing. In the research carried out in this area, serious attention is paid to comparative, systematic structural study of human and language, language and culture issues within the framework of the linguistic landscape of the universe. The reforms taking place in our country are of great importance for the development of language and culture in the field of modern linguistics. In the strategy of action on the comprehensive development of the Republic of Uzbekistan “.....promotion of scientific research and innovation activities, creation of effective mechanisms for the introduction of scientific and innovation achievements into practice, establishment of specialized scientific laboratories, high technology centers and technoparks in the presence of higher educational institutions and scientific research institutes” has created the opportunity to conduct in-depth scientific research in the field of language, in particular phraseology.

At the same time, the problem of onomastics of national originality before the science of linguistics is considered interesting and relevant in all languages. Although this area has been studied for almost a century and a half, but it still has not lost its relevance: researchers often come to different conclusions that contradict each other. While some scientists consider onomastics to be absolutely asemantic, others admit that there is only a colloquial meaning in it. For example, in the field of

anthroponyms, information about the personal referent of a noun is perceived as the meaning of a noun. Some researchers, observing modern trends in linguistics, try to identify components of the meaning of anthroponymy not only in speech, but also in language.

MAIN PART

To denote a referent in French speech as a sign of national originality, several variants of the name are used, which are designed to distinguish between “dynasty” and “other names”. Such variants of anthroponyms have a socio-assessment or contextual-evaluation pragmatics.

Distinguishing interlocutors from each other in terms of the right to use one of the variants of the name is another function of French anthroponymy, a rule formed in French culture, which is considered to be an encroachment on the “family” space. The same thing is clear: an anthroponym performs the function of a person's own exchanger, a substitute, and he deservedly acquires the status of a character. So it will have a certain meaning. In the composition of such meaning, denotative, significative and connotative semas need to be distinguished.

The Researcher S.Kamolova acknowledged that “significate anthroponym was identified as a meaning component that reflected the common signs of all potential referents. These signs consist of in gerent, that is, gender and tour semas, and rod semas reflect the most general descriptions of any referents in all anthroponyms, while Tour semas show more private signs. Denotation is connected with the descriptions of a particular referent, which are



indicated in the speech by a noun, and these objective descriptions are formed not only from in gerent semas, but also from afferent denotative semas, which are carried out in the process of communication with the meaning of the noun. Connotation is formed by afferent connotative semas, which mean additional associations and the attitude of the speaker to the noun referent". According to the scientist, the reference is understood in the manner of indicating the degree to which the noun entered into the speech as a colloquial phenomenon is associated with the referent. In connection with the strengthening of the image of a person (referent) in the minds of addressees and the recognition of these individual signs as components of the meaning of anthroponymy, single-referent and multi-referent anthroponyms are distinguished by specific features of speech events.

In revealing these specifics, it is possible to observe Advanced results in French linguistics. In French linguistics, psych systematic theory, based on a dynamic approach to language and speech phenomena, plays an important role. Such an approach presupposes the analysis of the characteristics of the anthroponym reference within the framework of a single process of expression of the noun in the primary and secondary semiotics in language, time of events and speech. An analysis of the cases identified using the application of the French article system developed by clothing is an example of this.

CONCLUSION

In the process of primary Semiosis, the specific features of the anthroponym reference in French at the time of its occurrence are manifested in such a way that the referent can be imagined by the speaker at a different level of abstract/accuracy and singles/generalities. It is known that the use of articles and prepositions in some of the anthroponyms of the French language is thread. This situation in the appropriate form of article finds its official expression. Traditionally, the article in the French language before anthroponym means the stylistic application of the noun, since in speech the event without article is inherent in it. At the same time, in the process of studying the material of the language, we found out the application of article, which in French speech cannot be understood from a stylistic point of view.

The participation of socio-cultural factors in the formation of the anthroponymy landscape, in turn, creates the basis for the collection of national-cultural and pragmatic information in each name-surname, which is actively used in linguistic and speech acts. Anthroponym is distinguished by its distinctive colorful semblance in the context of a particular culture, subject to the rules of the national

language and sensitively responds to the dynamics of the development of society.

Thus, the study of the signs of national originality in the French language of onomastics is of urgent importance.

REFERENCES

1. Камолова С.Ж. Француз антропонимларининг дискурсив-прагматик талқини. PhD диссерт. Иш. Қўлёзма ҳуқуқида УДК:81'373.231:81'42(=133.1) Самарқанд, 2020.
2. Bally P.-H. Pour une redéfinition du nom propre. Dans : Noailly. M., éd., 1995. - p. 137-144.
3. Guillaume G. Langage et science du langage. Paris-Québec, Presses de l'Université Laval 1-A.-G.Nizet, 1964. – 287 p.
4. Бегматов Э., Улуқов Н. Ўзбек ономастикаси. Библиографик кўрсаткич. – Наманган, 2008.
5. Ўлдошев Б. Ўзбек ономастикаси масалалари. Услубий қўлланма. Самарқанд: СамДУ наири, 2011.



KNOWLEDGE OF DANGERS AND PRACTICE OF SELF-MEDICATION AMONG SECONDARY SCHOOL STUDENTS OF ANOHACHIA SOUTH LOCAL GOVERNMENT AREA, DELTA STATE, NIGERIA

¹*Tawari Erebi Patricia , ¹ Boloya Vukumo Eric

¹Department of Chemical Pathology, Faculty of Basic Medical Sciences, College of Health Science, Niger Delta University, Bayelsa State, Nigeria

*Corresponding author: Tawari Erebi Patricia

ABSTRACT

Background: In recent times, self-medication has been largely aided by vigorous promotional adverts by pharmaceutical companies. Self-medication as an aspect of drug abuse is a threat to youths and adolescents, people take drug for many reasons, for example, for fun, escapism sensual stimulation and as a result of frustration. This study aimed to ascertain knowledge of dangers of self-medication among secondary school students.

Methods: The descriptive cross-sectional survey was used to study 280 students aged 12-21 years in Anohachia South LGA. The subjects were selected simple random sampling. Data collected using a well-structured questionnaire were analyzed using Statistical Package for Social Sciences (version 15). Test of associations employed Chi-square statistical too with the level of significance taken at 5%.

Results: Despite the fact that 75% respondents knew about self-medication, only 36% knew about dangers associated with self-medication. An association was established between knowledge of self-medication age, class, gender and religion ($P=0.0038, 0.032, 0.047, 0.001$ respectively).

Conclusion: There is inadequate knowledge on dangers of self-medication among students, and knowledge was influence by gender.

KEY WORDS: Knowledge, Dangers, practices, self-medication, secondary, student

INTRODUCTION

Self-medication can be defined as self-prescription, dispensing and administration of drug without a medical expert's direction and supervision¹. Self-medication is a global phenomenon and is an age long health issue. It is an act that is as old as man and has been practiced many centuries ago, whereby tree barks, roots and herbs were used to treat ailments that afflict man at those times².

In recent times, self-medication has been largely aided by vigorous promotion adverts by pharmaceutical companies. In the print and media, people are continually urged to keep fit by taking drugs to prevent and cure their common ailments such as readily available over-the-counter include pain relievers, cough remedies, vitamins, tonics and many

others³. Self-medication as an aspect of drug abuse is a threat to youths and adolescents. Many factors are incorporated in perpetuating the act of self-medication. There are responsible self-medication and non-responsible self-medication²; while responsible self-medication has to do with approved and available medicine in a safe and effective way as directed though with no prescription, non-responsible self-medication is the use of drugs in the treatment of self-diagnosed ailments of disease without supervision by a physician². The proximity and number of outlets like manufacturing plants, drug shops, and even peddlers contribute to the increased rate of self-medication among teenagers and adults due to availability and accessibility to drugs⁴. Again, one of the strongest social reasons for people's involvement in self-medication is peer pressure. Both



teenagers and adults are involved. Such peer influence is characterized by the desire to be accepted among friends or in social circumstance. Crime among juveniles and self-medication is associated with poverty, deprivation, broken homes, and lack of parental care. Parental influence is a factor that contributes to self-medication. When parents engage in self-medication their children observe them and become accustomed to medication around the house. To children from homes where parents self-medicate, medication is a way of life, and they tend to imitate their parent.

The main aim of this study was to determine the knowledge of dangers and practice of self-medication among secondary school students in Anohachia South Local Government Area, Nigeria

METHODS

The study employed a descriptive cross-sectional survey to determine knowledge of self-medication among students. Three-hundred questionnaires were administered of which 280 with complete information were utilized for the study. The students for the study were randomly selected from 10 registered secondary schools in Anohachia South Local Government Area. The procedure involved 3 stages within age the simple random non-replacement sampling technique was used to draw samples, thus giving every member equal chance to be sampled. With the same simple random non-replacement sampling technique, 10 secondary schools were selected from the 20 registered secondary schools. In each selected secondary school, 3 classes were drawn using the simple random non-replacement sampling technique. In each class 10 students were drawn by using pie random non-replacement sampling technique. From each school, 30 students were randomly sampled giving all

of 30 students from the 10 randomly selected secondary schools.

A self-administered questionnaire was used in the collection of the data. The questionnaire was divided into 2 sections, section A comprises of personal data while section B comprises of 10 questions based on the objectives of the study. The data were analysed using statistical package for social sciences (version 15). Test of association was done using Chi-square statistics, with level of significance taken at 5%.

Ethical Consideration

Ethical clearance was obtained from the authority of the 10 selected schools. Informed consent was obtained from the participants.

RESULTS

Table 1 indicated that greater number 230 (81.1%) of the respondents were below the age of 21 years. One-hundred and seventeen (41.8%), were males while 163 (58.2%) were females. About 36.0% were within Junior Secondary School, 179(64.0%) were in Senior Secondary School. Christianity (62.5%) followed by Islam (17.9%) has the highest population. On family type, 51.1% of the respondents belong to the monogamy family type followed by single parenting (31.1%) has the highest population.

Table 1: Socio-Demographic Frequency distribution

	Frequency	Percentage
Age		
12 - 14	50	17.9
15 - 17	97	34.6
18 - 20	83	29.6
21 and above	50	17.9
Total	280	100
Gender		
Male	117	41.8
Female	163	58.2
Total	280	100
JSS class	101	36.0
SSS class	179	64.0
Total	280	100



Religion		
Christianity	175	62.5
Islam	50	17.9
Pegan	28	10.0
Traditionalist	37	13.2
Total	280	100

Family type		
Monogamy	143	51.1
Polygamy	50	17.9
Single parent	87	31.1
Total	280	100

The Table 2 revealed that majority of the respondents 75% had knowledge of what self-medication was. In relation to the dangers associated with self-medication 64.0% do not have knowledge of dangers associated with self-medication. While on whether self-medication can lead to wrong diagnosis revealed that 48.0% of the respondents had knowledge that self-medication can lead to wrong diagnosis and treatment. About 41.0% had knowledge that self-medication can lead to drug addiction and dependence, while 29.0% had knowledge that self-medication can lead to damage of some vital organs.

This knowledge seemed to be significantly associated with age (P=0.0038), class (P=0.032), gender (P=0.047), and religion (P=0.001).

The findings of the current study revealed that adverts on TV, radio and new paper, friends, family, anxiety and to feel affiliated (64.3%, 71.4%, 78.6%, 56.4% and 54.3% respectively) were the motivational factors to self-medication among the students. Table indicates that respondents who engaged in self-medication were 153 (54.6%) and those who do not engaged in self-medication were 127 (45.4%). The following is the breakdown of respondents who practice self-medication according to family type and gender; those from monogamy family 46 (16.4%), polygamy 38 (13.6%) and single parenting 69 (24.6%). On practice of self-medication, 90 (32.1%) were males while 63 (22.5%) were females. Table 6 suggests that family type is significantly associated with practice of self-medication (p=0.047 for polygamy and p=0.001 for single parenting).

Table 2: Level of Knowledge of Self-medication and its Associated Dangers.

	Frequency (n = 280)	Percentage (%)
Do you know what self-medication is?		
Yes	210	75.0
No	70	25.0
Total	280	100
Do you know that there are dangers associated with self-medication		
Yes	100	36.0
No	180	64.0
Can self-medication lead to wrong diagnosis and treatment?		
Yes	135	48.0
No	145	52.0
Total	280	100



Can self-medication lead to drugs addiction and dependence?		
Yes	114	41.0
No	166	59.0
Total	280	100
Does self-medication lead to damage of vital organs like the liver?		
Yes	80	29.0
No	200	71.0
Total	280	100
Can Self-medication lead to drug resistance due to prolonged treatment?		
Yes	130	46.0
No	150	54.0
Total	280	100

Table 3: Knowledge on Dangers Associated with Self-Medication, General Information, Gender, Class and Religion

General Information	Yes (%)	Demographic factors	χ^2	P
Knowledge of self-medication	210 (75.0)	Age	5.028	0.0038*
		Class	8.633	0.032*
		Gender	12.65	0.047*
		Religion	15.37	0.001*
Knowledge of Dangers	100 (25.7)			

*Significant at $p < 0.05$.

Table 4: Motivational Factors of Self-medication

	Yes (%)	No (%)
Motivational Factors		
Adverts on TV, radio & newspaper	180 (64.3)	100 (35.7)
Friends	80 (28.6)	200 (71.4)
Family	220 (78.6)	60 (21.4)
Anxiety	130 (46.4)	158 (56.4)
To feel affiliated	152 (54.3%)	128 (45.7)

Table 5: Family Type, Gender and Practice of Self-Medication

	Yes (%)	No (%)
Family type		
Monogamy	46 (16.4)	97 (34.6)
Polygamy	38 (13.6)	12 (4.3)
Single parents	69 (24.6)	18 (6.4)
Total	153 (54.6)	127 (45.4)
Gender		
Male	90 (32.1)	27 (9.6)
Female	63 (22.5)	100 (53.7)
Total	153 (54.6)	127 (45.4)

**Table 6: Chi-Square Test of Family Type, Gender and Practice of Self-Medication**

Family type	Practice (N/%)	χ^2	Df	P value
Monogamy	46 (16.4)	64.436	2	0.65
Polygamy	38 (13.6)	13.588	2	0.047*
Single parenting	69 (24.6)	26.972	1	0.001*

*Significant at $p < 0.05$.

DISCUSSION

The Socio-demographic data according to Table 1 revealed that most of the participants were below the age of 21 years. This shows that most of the respondents were young and active and within their teenage years. This finding is similar to the findings of Awosusi and Konwea² where majority of their respondents were within the age range of 10-19 years. Respondents from senior class were more represented in the current study. Christianity followed by Islam has the highest population. This may be due to the fact that Christianity is the dominant religion in the area study. General knowledge on self-medication was good but poor for dangers associated with self-medication in the current study. The current study also revealed that respondents' knowledge on whether self-medication can lead to wrong diagnosis and treatment, drug addiction and dependence, damage to vital organs and to drug resistance due to prolonged use shows poor knowledge. It can however be argued that because the respondents in the current study were teenagers and lack information of the possible dangers associated with self-medication. Gangopadhyay⁵ found that lack of awareness of dangers of taking drugs without prescription is one of the reasons of self-medication practice. Kumar and Sharma⁶ in their study among medical students found that 52% respondents had good knowledge of self-medication and on dangers of self-medication. This may probably be due to the fact that respondents were medical students who have knowledge regarding the dangers associated with self-medication. The current study also revealed that 41.8% were males and 58.2% were females of which 32.1% males practice self-medication while 22.5% who indulged in self-medication were females. This finding on practice is similar to the findings of Philip, *et al.*,⁷.

On motivational factors of self-medication, this study shows that adverts on Television, radio and newspaper, friends, family, anxiety and to feel affiliated were reported as the motivational factors for self-medication (Table 4). Salem¹ and Fainzang³ in their studies found that internet and advertisement were the major source of identifying severity of a disease and respond to symptoms and gives credibility to the drug. Increase adverts on drugs

threatens health because it can lead to appropriate medication use. In the current study, it was also evidence that age, class, and religion were significantly associated with knowledge of self-medication (Table 3). This finding is in agreement with others studies^{2, 7}. The association was such that those within the ages of 15-21 years, in senior class and who were Christians had good knowledge of self-medication. Berrtoldi *et al.*,⁸ found that self-medication was higher among young people.

Practice of self-medication seem to be significantly associated with polygamy and single parenting families ($p=0.047$, $p=0.001$). Almasdy and Shariff⁹ found that family members are a reason of self-medication. Although girls dominated in the current study (58.2%), self-medication was significantly practiced among the males. Findings from our research (Table5) is consistent with the finding of Salem¹ where males were more likely to practice self-medication more than the females.

CONCLUSION

The findings of the current study suggest that students' knowledge and dangers associated with self-medication were not adequate enough to limit their exposure to self-medication. Much of what they knew were not sufficient to encourage behavioral change and health seeking behavior that is adequate to limit or eradicate self-medication used. Religious affiliation, gender, class and age had influence on knowledge of dangers of self-medication among the study participants in the current study. Family influence and adverts on radio and television, feeling of affiliation have high motivational effects on the students.

ACKNOWLEDGEMENTS

The authors would like to acknowledge and thank the students who participated in this research and the school Principals from the 10 registered secondary schools in Anohachia South Local Government Area selected for this research.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.



REFERENCES

1. Salem, B.B. (2015). *Determinants of self-medication practices*. *World Journal of Pharmacy and Pharmaceutical Sciences*, Vol.4, Issue 10, 138-154.
2. Awosusi, A.O. and Konwea, P.E. (2015). *Self-medication Practice among Secondary School Students in Ekiti State, Southwest Nigeria*. *Journal of Advances in Medical and Pharmaceutical Sciences*, 3(2): 61-68.
3. Fainzang, S. (2013). *The other side of self-medicalization: self-medication and self-Medication*, *Culture Medical Psychiatry*, 37(3):488-504.
4. Fadare, J.O. and Tamuno, I. (2011). *Antibiotic self-medication among undergraduate in northern Nigeria*. *Journal of Public Health Epidemiology*, 3(5):217-220.
5. Gangopadhyay, S. (2012). *Motivation of self-medication: a behavioral analysis*, *International Journal of Management Research and Review*, 2(13): 132-142.
6. Kurma, R. and Sharma, S. (2015). *Knowledge, Attitude and Practice of Self-Medication among Medical Students*. *Journal of Nursing and Health Science*, Vol. 4, Issue 1, pp. 89-96.
7. Philip, P.T., Senan, A., Reji, S. and Kumar, T.R.A. (2015). *Assessment of self-medication practices among undergraduate medical and paramedical students: a case of rural medical schools of Tamil Nadu, India*. *World Journal of Pharmacy and Pharmaceutical Sciences*, Vol. 4 Issue 10, pp.1587-1604.
8. Bertoldi, A. Camargo, A., Telis, S.M., Menezes, A., Formoso, A.M., et al. (2014). *Are older women likely to use medicines than older men? Results from AHSP study*, *Caspian Journal of International Medicine*, Spring, 5(2): 77-81.
9. Almasdy, D. and Sharrif, A. (2011). *Self-medication practice with nonprescription medication among university students: a review of the literature*, *Archives of Pharmacy Practice*, 2(3):95-100.



SHORTCOMINGS IN ONLINE GERMAN LANGUAGE LEARNING

Musaeva Guzal Nematillaevna¹, Zainieva Hilola Shuhratullaevna²

¹Dozent, Abteilung für Übersetzungstheorie und -operationen, Usbekische Staatliche Universität für Weltsprachen

²Lehrer der Abteilung für Theorie und Lehrmethoden der englischen Sprache, Taschkent State Pedagogical University, benannt nach Nizami

ANNOTATION

This article discusses the most pressing issues and problems in the field of distance learning and also shows several innovative ways to solve these problems, recommendations with several examples that can be applied in the modern process of online learning.

KEY WORDS AND CONCEPTS: *distance learning, online learning, artificial intelligence, e-learning, innovative technologies, problem solving, literary translation, traditional learning*

AUF EINIGE PROBLEME, DIE YUZA IM DEUTSCHEN LEHREN ONLINE KOMMEN

Musaeva Guzal Nematillaevna

Dozent, Abteilung für Übersetzungstheorie und -operationen, Usbekische Staatliche Universität für Weltsprachen

Zainieva Hilola Shuhratullaevna

Lehrer der Abteilung für Theorie und Lehrmethoden der englischen Sprache, Taschkent State Pedagogical University, benannt nach Nizami

РЯД НЕДОСТАТКОВ В ОНЛАЙН-ОБУЧЕНИИ НЕМЕЦКОМУ ЯЗЫКУ

Мусаева Гузаль Нематиллаевна,

*Преподаватель кафедры теории и операций перевода
Узбекского государственного университета мировых языков.*

Зайниева Хилола Шухратуллаевна,

*Преподаватель кафедры теории и методики обучения
английского языка, Ташкентский государственный
педагогический университет имени Низами*



Аннотация

В этой статье обсуждаются наиболее актуальные вопросы и проблемы в сфере дистанционного обучения и также показаны несколько инновационных способов решения этих проблем, рекомендации несколькими примерами, которые могут быть применены в современном процессе онлайн-обучения.

Ключевые слова и понятия: дистанционное обучение, онлайн-обучение, искусственный интеллект, электронное обучение, инновационные технологии, решение проблем, художественный перевод, традиционное обучение

Einführung. Es ist bekannt, dass moderne Informationstechnologien und -systeme eine wichtige Rolle bei der schrittweisen Verwirklichung der Ziele des Gesetzes der Republik Usbekistan "Über Bildung" und des "Nationalen Ausbildungsprogramms" spielen. Moderne Informationstechnologien: Multimedia, Übersetzung von einer Sprache in eine andere, Konvertierung von einem Alphabet in eine andere, Computerteststeuerung, Scan-Technologie, Internet, E-Mail, Web-Technologie, elektronische virtuelle Bibliothek, Fernunterricht, Präsentationstechnologie, Präsentationstechnologie, Systeme des Denkens und so weiter.

Wir alle wissen, dass die Einbeziehung moderner Informationstechnologien in das Bildungssystem im wahrsten Sinne des Wortes, die ein wichtiges Bedürfnis für die Entwicklung unseres täglichen Lebens und unserer Perspektiven darstellt, an Boden gewinnt. Der größte Feind des Online-Lernens ist die Langsamkeit oder Trennung dieser ISPs. In dieser Situation kann der Lernwunsch des Schülers nachlassen oder gereizt werden. Denn heute ist das Lernen über das Internet eine innovative und interessante Möglichkeit, den Bildungsprozess zu organisieren. Mit dem Aufkommen des Internets haben Unternehmen auf der ganzen Welt begonnen, Online-Kompetenzprogramme einzuführen. Später führten die Verantwortlichen für Schulung und Entwicklung so viele Kurse wie möglich auf ihren Plattformen ein. Es war noch nie einfacher, Tausende von Videos, Lektionen und E-Learning-Inhalten zu präsentieren.

Relevanz. Es ist bekannt, dass dieser Stil viele Vorteile hat. An allen Universitäten wird eine Reihe von Maßnahmen ergriffen, um Fernlernetzen und -technologien umzusetzen. Die Ausbildung eines Spezialisten, der die Anforderungen von heute vollständig erfüllt, ist eine Anforderung der Zeit. Gegenwärtig wird im Land viel kreative Arbeit geleistet, um die jüngere Generation zu erziehen, sie zu erziehen, sie in der Nähe moderner Informationstechnologien zu halten und ihnen beizubringen, mit neuen Geräten und Technologien zu arbeiten. Das wichtigste davon ist

"Fernlernetzen und -technologie". Unter diesem Gesichtspunkt können die Phasen der Vorbereitung der jüngeren Generation auf das Fernlehrsystem folgendermaßen umgesetzt werden:

Fernunterricht (DL) gewinnt in der heutigen Informationstechnologie zunehmend an Bedeutung. Dies liegt daran, dass sich diese Art der Bildung in einigen positiven Aspekten von den bestehenden Arten der Bildung unterscheidet. Der Unterschied zwischen meiner Vollzeitausbildung und anderen Arten der Ausbildung besteht darin, dass diese Art der Ausbildung eine breite Palette von Menschen anziehen kann. Es verkörpert die positiven Merkmale der Vollzeit- und Teilzeitausbildung. In dieser Hinsicht ist MO heute eine der vielversprechendsten Bildungsformen. [1]

Zweck. Es ist nicht notwendig, einen bestimmten Teil der Bevölkerung zu sammeln, der am Standort der Bildungseinrichtung für Fernunterricht studieren möchte. Zweitens müssen weder der Hörer noch der Schüler zu viel ausgeben. Drittens ist es möglich, Altersbeschränkungen für diejenigen auszuschließen, die an dieser Art von Bildung beteiligt sind. Die Entwicklung der Informationstechnologie erfordert einen neuen Ansatz für die Organisation des Fernunterrichts. Ziel unseres Artikels ist es, Kommunikations- und Netzwerktechnologien, die die Grundlage moderner Modelle des Fernunterrichts bilden, effektiv zu nutzen und neue Formen des Online-Lernens einzuführen. Online-Bildung hat zwar erhebliche Vorteile, ist jedoch nicht ohne Herausforderungen. Diese Technologien bieten Benutzern eine breite Palette von Informationen sowie die Herausforderung, sie zu schützen, wie beispielsweise das Fehlen einer direkten Kommunikation zwischen dem Lehrer und dem Hörer im Fernunterricht. Beispielsweise gibt es bestimmte Schwierigkeiten bei der Organisation eines problembasierten Lernprozesses. Problembasiertes Lernen bei der Ausbildung von Zuhörern als reife Fachkräfte kann durch Telefonkonferenzen erreicht werden. Dies löst das Problem jedoch nicht vollständig. Es müssen zusätzliche Schulungsmaterialien entwickelt werden, um dieses Problem anzugehen. Es ist ratsam,



verschiedene Ebenen von Problemzuweisungen, Anweisungen, die eine problematische Situation verursachen, usw. zu haben.

Der Hauptteil. In diesem Artikel konzentrieren wir uns auf die folgenden Probleme, die in einem fremdsprachigen Online-Kurs auftreten können:

Einige Leute finden Online-Aktivitäten langweilig. Viele Online-Kurse bestehen aus endlosen Materiallängen, gefolgt von einer langen Liste von Testfragen, die die Teilnehmer in keiner Weise motivieren. Es ist, als würde er den Eindruck von E-Learning anstelle von E-Learning erwecken. Solche Kurse führen dazu, dass sich viele Teilnehmer von Online-Aktivitäten langweilen. Dieser Mangel an Engagement und Motivation ist einer der Hauptgründe für das Scheitern von E-Learning-Kursen. Die Teilnehmer möchten einfach nicht an den Sitzungen teilnehmen, gehen nicht zur Plattform und schließen den Kurs nicht ab. Methodistengelehrte J. Wachtler und M. In ihrem Artikel „Gemeinsam im Medienunterricht“ beweist Ebner eine einfache Lösung: [2] Wir müssen dynamische, unterhaltsame und interaktive Online-Kurse entwickeln. Das war in den frühen Tagen des E-Learning sehr schwierig, aber jetzt ist es viel einfacher. Wenn Sie Ihr Training mit Videos, Geschichten, Spielösungen, praktischen Spielen oder Videospiele bereichern möchten, müssen Sie Anreize schaffen oder Online-Testformulare, Fragebögen in Form von Quiz, Blättern usw., Filmen und Audiomaterial einreichen.

Darüber hinaus können die Schüler zunächst einen Film auf der Plattform ansehen und dann Fragen stellen (z. B. Sprachen lernen, Kommunikationsfähigkeiten, Videoanalyse usw.). Grundsätzlich bieten solche Filme (oder sogar Cartoons) und Videokurse den Schülern die Möglichkeit, mit Hilfe moderner und praktischer Audio-Video-Geräte sowie eines guten Sprachenlernens schneller und einfacher zu lernen. Im heutigen Zeitalter innovativer Technologien gibt es neben einer klaren Lernsoftware für Online-Tests auch sogenannte "Learning by Doing" -Plattformen. Zugegeben, in einem Schulungskurs, in dem ein offizieller Titel oder ein Zertifikat verliehen wird, sind die Teilnehmer mehr an der Schulung interessiert. Wir können den Wettbewerb auch stimulieren, indem wir Bewertungen und Klassifizierungen festlegen und die Besten belohnen (mit finanziellen oder anderen Belohnungen). All dies erhöht die Aktivität der Schüler und ermöglicht ihnen, nicht nur Kurse zu absolvieren, sondern auch mehr und besser zu lernen.

Eines der nächstwichtigsten Probleme ist, dass die Teilnehmer häufig mit technischen Schwierigkeiten konfrontiert sind. Technische

Probleme sind ein großes Hindernis für das Online-Lernen. Die meisten Probleme werden durch Betriebssysteme, Browser oder Smartphones verursacht. Teilnehmer aus vielen Teilen des Landes beschwerten sich über die Schwäche des Internets. Wenn es um dieses Problem geht, können wir Online-Kurse empfehlen, die weniger internen Speicher benötigen, langsamere Internetgeschwindigkeiten erfordern und ein festes und einfaches Skript enthalten. Weil wir durch solche Online-Kurse viele Probleme für die Ausbildung von Studenten gelöst haben, die in verschiedenen Teilen des Landes leben, hauptsächlich im Zusammenhang mit der Geschwindigkeit des Internets. Dazu müssen wir zunächst die Übung mit verschiedenen Smartphones, Browsern und Betriebssystemen ausprobieren.

Wenn wir uns andere bequeme Möglichkeiten ansehen, um online zu lernen, können wir auch einfache, interessante und häufig gestellte Fragen zum Service stellen, die die Schüler gut motivieren und eine vollständige Hilfeseite haben können. Wir halten es für besser, die verfügbaren auszuwählen Online Kurse.

Wenn der Online-Kurs über ein Chat-Tool, eine E-Mail-Adresse oder ein Forum verfügt, um technische Probleme zu lösen, wird sichergestellt, dass die Technologie kein Problem darstellt und den Lernprozess nicht beeinträchtigt.

Ein weiteres Problem ist, dass das E-Learning-Format den Teilnehmern ein hohes Maß an Flexibilität bietet. [3] Infolgedessen können die Schüler jederzeit und überall in ihrem eigenen Tempo und ohne körperliche Einschränkungen Unterricht nehmen. Es ist jedoch diese großartige Gelegenheit, die oft zu einem anderen Problem führen kann, nämlich zu Inaktivität. Das häufigste Problem ist, dass wir einige Zeit darauf warten, dass die Teilnehmer beginnen, was dazu führt, dass wir am Ende nur sehr wenig oder gar keine Aktivität haben. Um dies zu verhindern, müssen wir ein Zeitlimit festlegen und Erinnerungen senden. Im Allgemeinen sollten wir keine Angst haben, ein Zeitlimit festzulegen. Die Tatsache, dass die Kurse online abgehalten werden, bedeutet nicht, dass es unmöglich ist, Fristen festzulegen.

Es ist wissenschaftlich erwiesen, dass die beste Lernmethode die praktische Anwendung ist. Nur wenn wir üben, was wir tun und versuchen (Lerns Experimente), können wir alle Unterrichtsmaterialien und -inhalte, die wir lernen und lernen, besser und schneller beherrschen und sie lange in Erinnerung behalten. Leider konzentriert sich die Online-Plattform nur auf technische Inhalte und unbegrenzte Berichte. Dies bedeutet, dass die Teilnehmer nicht üben können und nur sehr wenig Gelegenheit haben, das volle Potenzial des



Lernprozesses auszuschöpfen. Mit Hilfe von Stimulanzen können wir eine praktische Lösung für dieses Problem finden, indem wir die Verwendung nützlicher praktischer Kurse empfehlen [5].

Einer der wichtigsten Teile des Kurses ist, dass es für unsere Studenten nützlich und praktisch ist, wirklich in die Praxis umzusetzen. Wenn E-Learning-Kurse dieses Kriterium erfüllen, können die Teilnehmer alles, was sie gelernt haben, im wirklichen Leben anwenden.

Als Unterrichtsmaterial verwenden wir im Unterricht nicht nur Audio- und Videogeräte, sondern auch Websites und elektronische Wörterbücher. Denn in der heutigen Ära innovativer Technologien ist eine unabhängige Bildung ohne das Internet nicht vorstellbar. Das Internet bedeutet "Netzwerk" [6]

Im Zeitalter der Globalisierung ist die Entwicklung des interdisziplinären Fernunterrichts daher eine Möglichkeit, die Bildung auf den Weltstandard zu bringen.

Die Schüler dürfen zu Beginn des Kurses keine technischen Probleme haben und diese innerhalb der vorgegebenen Zeit ohne technische Probleme abschließen. Angenommen, die Schüler konnten das, was sie während einer Online-Lektion gelernt hatten, in die Praxis umsetzen. Aber wie hat sich das auf die Schüler ausgewirkt? Können wir davon ausgehen, dass sie mit dem praktischen Unterricht, ihrer Arbeit und der Arbeit des Lehrers zufrieden waren? War diese Online-Aktivität tatsächlich auf die Ziele der Teilnehmer oder Studenten zugeschnitten? Die Antwort auf diese Fragen finden wir in der genauen Lösung des Problems, dh in der guten Planung vor Beginn des Unterrichts. Wir müssen zuerst den Zweck des Trainings kennen und wissen, warum die Teilnehmer an diesem Online-Kurs teilnehmen sollen. Am wichtigsten ist, dass die Ausbildung den Studenten oder der Institution zugute kommt. Wir müssen das Material, das tatsächlich zum gemeinsamen Ziel beiträgt, sorgfältig auswählen. Zu diesem Zweck stellen wir natürlich Themen und Materialien zum Fachgebiet zur Verfügung, um die Kenntnisse und Fähigkeiten der Schüler gemäß der Verteilung und dem Zeitplan der Lehrbücher zu verbessern.

Es versteht sich von selbst, dass der traditionelle Unterricht verschiedene Methoden verwendet, um den Schülern ein Thema zu vermitteln: Handzettel und Lehrbücher, verschiedene Actionspiele usw. [7], aber es ist nicht möglich, all dies im Online-Unterricht zu tun. Fernunterricht erfordert die Verwendung anderer Methoden, die diese Methoden ersetzen, dh zielorientiert und motivierend. Für kollaborativen Grundunterricht in Fremdsprache und Übersetzung müssen die Schüler kreativ, individuell und intellektuell sein. Mit

anderen Worten, während des Unterrichts sind die Schüler kreativ und produktiv: Antworten auf Fragen finden, Text für Bilder verfassen, Dialoge oder Kurztexte mit den erforderlichen Wörtern und Phrasen erstellen, Lösungen für problematische Situationen finden, Lösungen für Probleme finden, Lösungen für Probleme finden, Lösungen für Probleme finden, Lösungen für Probleme finden. Die lexikalischen und semantischen Eigenschaften von Wörtern aufdecken und analysieren.

Auf diese Weise können die Schüler im Fernunterricht auf Online-Plattformen zuhören, sehen, verstehen und übersetzen. Wir führen diese Übungen über das Zoom-Programm, den Telegramm-Messenger und andere Plattformen durch. All dies zeigt also, dass wir die korrekte und effektive Organisation innovativer Online-Lektionen in unserem Land weiter verbessern und die Qualität computer-digitaler Technologien verbessern müssen, und dass wir als Lehrer zusammenarbeiten müssen.

Um im Online-Unterricht wie im traditionellen Unterricht die gewünschten Ergebnisse zu erzielen, konzentrieren wir uns darauf, wie die Schüler über die Lernplattform, Zoom- und Telegrammprogramme Übersetzungen und deren Interpretation erhalten. Nach bestem Wissen und Gewissen werden wir uns einige Beispiele für grundlegende Fremdsprachen- und Übersetzungsstunden mit den folgenden Methoden ansehen.

Es ist bekannt, dass Übersetzungen, insbesondere vom Deutschen ins Usbekische, Intelligenz, Einfallsreichtum, eine breite Vorstellungskraft und natürlich fundierte Fachkenntnisse erfordern. Weil die Strukturen beider Sprachen nicht kompatibel sind. Das Anpassen in Sätzen, das Auswählen der richtigen Wortalternativen und insbesondere das Übersetzen von Wörtern und Phrasen oder Sprichwörtern, die eine bildliche Bedeutung haben, ist ein komplexer Prozess. Die zukünftigen jungen Übersetzer gingen individuell mit dem Text um und nutzten ihr Potenzial, ihr Wissen und ihr kreatives Potenzial, um die genaueste Interpretation zu erzielen.

Da digitale Technologien ein wesentlicher Bestandteil unseres Lebens werden, ermöglicht der Einsatz von Computertechnologie in der Bildung, dh der Lernplattform, den Schülern, unabhängiger zu lernen und unabhängig zu arbeiten. Dies ist natürlich einer der wichtigsten Aspekte des Online-Unterrichts [8]. Einer der Nachteile der Schüler, die das Thema auf sozialen Plattformen lernen und beherrschen, besteht darin, dass sie ihre praktische, unabhängige Arbeit weniger produktiv und bei Aufgaben auf der Plattform oder durch Hinzufügen von Zoom ausführen können. Durchdachte



Unterrichtsmaterialien und deren ordnungsgemäße Verteilung sowie die ordnungsgemäße Unterrichtsplanung sind entscheidend für den Erfolg eines Online-Kurses. Dies beinhaltet die ständige Anpassung und Reflexion des Konzepts. Das entwickelte Konzept wird sicherlich zum Beispiel in Form eines Skripts oder eines didaktischen Plans helfen - es wird unsere Zeit bei der Umsetzung unserer Ideen rechtzeitig sparen.

Wie bei der persönlichen Anleitung müssen wir bei der Planung und Gestaltung des Online-Lernens sicherstellen, dass wir die Hauptkomponenten der Lektion - die Ziele, Inhalte, Methoden und Aufgaben - überprüfen und vorbereiten.

Es ist erfreulich, dass es weltweit viele Datenbanken für interaktives Lernen gibt. Der Internationale Rat für Fernunterricht arbeitet und die Zahl der D-Learning-Fernlerner wächst täglich. [9]

Viele seiner Vorteile, wie die Details des Fernunterrichts, die Kreativität im Unterricht, die Möglichkeit zum selbständigen Lernen und die Freiheit, Zeit für das Lernen zuzuweisen, spiegeln sich weitgehend in der pädagogischen Forschung der führenden Wissenschaftler unseres Landes wider.

Es ist erfreulich, dass in unserem Land Intellektuelle, einschließlich Lehrer, alle, die sich für die Erziehung der neuen Generation interessieren, insbesondere junge Zuhörer, über moderne Computer- und Telekommunikationstechnologien, insbesondere das Internet, Zugang zu interaktiver Bildung haben.

Da unser Land Usbekistan eine starke Wirtschaft und einen prosperierenden, rechtsstaatlichen Staat aufbaut, ist es eine Frage des Lebens und der Zeit, die Informationskompetenz und die Rechtskultur unseres Volkes zu verbessern. Um dieses Ziel zu erreichen, muss die interaktive Bildung, deren Grundlagen jetzt gebildet werden, in Betrieb genommen werden.

Zunächst können wir in einem Online-Kurs herausfinden, was unsere Ziele sind. Lernziele Beschreiben Sie die Kenntnisse, Fähigkeiten und Kompetenzen, die die Schüler in dieser Veranstaltung oder in diesem Abschnitt erwerben müssen. Um die Ziele des Online-Lernens zu bestimmen, fragen wir uns, was die Schüler nach dem Unterricht tun können sollten. Wir setzen Unterrichtsziele, damit die Schüler sie zu ihren Lernzielen machen können.[11]

Kurz gesagt, wie in der traditionellen Bildung besteht die Hauptaufgabe der Online-Bildung darin, die Zusammenarbeit zwischen den Schülern zu stärken, unsere Ziele und Hoffnungen sehr klar zu vermitteln und unsere Schüler zuversichtlich und komfortabel zu machen.

Verweise

1. *Lernen mit Multimedia und Internet. 3. Aufl. Weinheim, S. 445-463*
2. *Wachtler J., Ebner M. Digitale Medien: Zusammenarbeit in der Bildung, Waxmann 2016, Münster, New York*
3. *Tursunov F.S. Raqamli texnologiyalarni ta'lim jarayonida qo'llanilishi.library.ziyonet.uz/.*
4. *Lernen mit Multimedia und Internet. 3. Aufl. Weinheim, S. 445-463*
5. *Apel H.,Kraft S. Online lehren: Planung und Gestaltung netzbasierter Weiterbildung, Bertelsmann Verlag 2003, Bielefeld.*
6. *Petko, D., Prasse, D. & Reusser, K. (2014). Online-Plattformen für die Arbeit mit Unterrichtsvideos: Eine Übersicht. Beiträge zur Lehrerinnen- und Lehrerbildung, 32 (2), 247-261.*
7. *Wachtler J., Ebner M. Digitale Medien: Zusammenarbeit in der Bildung, Waxmann 2016, Münster, New York*
8. *Apel H.,Kraft S. Online lehren: Planung und Gestaltung netzbasierter Weiterbildung, Bertelsmann Verlag 2003, Bielefeld.*
9. *A.R.Miraximov., S.I.Raxmonqulova. "Internet va undan foydalanish asoslari", T.: 2001-38 b.*
10. *Petko, D. (2017). Die Schule der Zukunft und der Sprung ins digitale Zeitalter. Wie sieht eine zukunftsfähige Lernkultur aus, in der die Nutzung digitaler Technologien eine Selbstverständlichkeit ist? Pädagogik, 69 (12), 44-47.*
11. *Balk, M. (2000): Evaluation von Lehrveranstaltungen. Die Wirkung von Evaluationsrückmeldung. Frankfurt a.M.*

WEBSITES

12. <https://www.bildungonline.at>
13. www.lernenzuhause.nibis.de
14. Saviya.uz



UNIVERSAL INJURIES SURROUNDED BY BASKET PLAYERS: AN OVERVIEW

S. Senthil Kumaran¹, A. Abdul Halik², S. Princy³

¹ Director, Unicorn Fitness, Madurai, Tamilnadu, India

² PhD Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India

³ PhD Research Scholar, Department of Physical Education and Yoga, Bharathidasan University, Tiruchirappalli, Tamilnadu, India

ABSTRACT

Basketball was first acquainted with the world in 1891 by Dr. James Naismith, utilizing a soccer ball and two peach crates. Today, high velocity, actual games hardly take after the first game. With current balls, high speed game comes numerous chances for wounds. It is assessed that more than 1.6 million wounds are related with ball every year. As indicated by an investigation of basketball players by the National Athletic Trainers' Association: 22% of all male basketball players supported at any rate 1 time misfortune injury every year. About 42% of the wounds were to the Ankle/foot, 11% hip and thigh, and 9% knee. Injuries were the most well-known kind of injury (43%). General injury was the second most regular sort of injury (22%). About 60% of the wounds happened during work on featuring the need to heat up and lash for preparing. About 59% of game-related wounds happened during the second 50% of the game, which recognizes weakness as an inclining factor. Counteraction is superior to remedial any wounds. Preventive methods intended to keep something unwanted like injury/sickness/infection or mischief from happening. Therapeutic implied ready to fix or relieving injury/sickness/illness.

1. INTRODUCTION

Basketball season now in progress, players will consider objectives and assumptions for the year where they remain in the setup, a particular detail, or group positioning. What may not be remembered for the rundown of objectives is by and large liberated from injury, which could ostensibly be perhaps the greatest factor to having the option to achieve the entirety of different objectives. Basketball is viewed as a physical game, instead of a crash sport like football or hockey. It has one of the greatest injury rates contrasted with other physical games with major parts in the people having the most noteworthy danger. Exploration has distinguished a modest bunch of wounds that are regular among basketball players:

2. MOST COMMON INJURIES IN BASKETBALL PLAYERS

2.1 Ankle sprains

From high school to the professionals, ankle sprains are the most common injury for basketball players. It is an injury of ligaments that stabilize the ankle joint, most often the ones on the outside (lateral aspect). The injury can occur when a player tries to move side-to-side quickly or when a player comes down from jumping and lands on another player's foot. Strengthening and stretching of the ankle are important to both preventing the injury and treating it. Once a player suffers an ankle sprain, he or she is at increased risk of injuring it again. Taping the ankle



or using an ankle brace can help try to prevent future ankle sprains.

2.2 Knee Ligament Injuries

Basketball players are often afflicted by injuries of ligaments of the knee, commonly the MCL (medial collateral ligament) and ACL (anterior cruciate ligament). The MCL can be injured in varying degrees, ranging from a mild sprain to a complete tear. If this is the only injury of the knee, it can often heal well without surgery. However, an injury of the ACL is most commonly a complete tear, which is a season-ending injury as it requires surgery to reconstruct the ligament followed by a long rehab program. Players can attempt to prevent these injuries through a neuromuscular training program which helps with strength and balance to keep the knee stable.

2.3 Jumper's Knee

This term refers to an injury of the patellar tendon that connects the kneecap (patella) to the lower leg (tibia). The tendon is put under significant stress the repetitive jumping and sprinting involved in playing basketball. In mild cases, the tendon can be inflamed ("tendinitis") but more often it is a longer-lasting injury that flares up during periods of intense activity ("tendinosis"). Jumper's knee is best treated with rest, stretching, anti-inflammatory medications, and a strengthening program once it has calmed down. Some players choose to use a patellar tendon strap.

2.4 Achilles Tendon Injuries

Similar to jumper's knee, the Achilles tendon is under a great deal of stress with basketball. The Achilles tendon can develop as an overuse injury in the case of tendinitis and tendinosis, but it can also be an acute injury in the case of a tendon rupture. An Achilles tendon rupture is another season-ending injury that requires surgery. Preventing these injuries requires good stretching of the calf and Achilles tendon as well as strengthening exercises, specifically "eccentric" exercises.

2.5 Jammed Fingers

Jammed fingers occur when the ball contacts the end of the finger and causes significant swelling of a single joint.

2.6 Facial Cuts

A face cut is when an offensive player makes a cut that puts the player between the basketball and their defender.

2.7 Deep Thigh Bruising

Deep thigh bruising (contusion) is another common basketball injury, typically caused by an opponent's elbow or knee inadvertently striking a player's thigh muscles. Treatment of thigh bruising.

2.8 Stress Fractures

Stress fractures can occur from a rapid increase in activity level or training or from overtraining. Stress fractures in basketball most commonly occur in the foot and lower leg (tibia).

2.9 Concussion

This is a risk for all contact and collision sports. In basketball, a concussion can occur from a player's head hitting another player (head-to-head/shoulder/elbow/knee/etc.) or when the head hits when falling to the floor. Players and coaches should be aware of symptoms of concussion so a player with a suspected concussion can undergo the necessary. Treatment involves rest from exercise followed by a slow return to play once symptoms have subsided.

3. PREVENTIVE MEASURES

3.1 Systematic Training

Must be follow the principles of training methodologies warming up, limbering down, concentrate basic and skill-related training physical fitness components, periodization, and systematic planning of training schedule. Have a pre-season physical examination and follow your doctor's recommendations. Pay attention to environmental recommendations, especially in relation to excessively hot and humid weather, to help avoid heat illness. Avoid overuse injuries. More is not always better! Many sports medicine specialists believe it is beneficial to take off at least one season each year. Try to avoid the pressure that is exerted on young players to overtrain. Listen to your body and decrease training time and intensity if pain or discomfort develops. This will reduce the risk of injury and help avoid burnout. Talk with your coach and/or basketball trainer about an ACL injury prevention program and incorporating the training principles into team warm-ups and limbering down. The players should return to play only when clearance is granted by a health-care professional.

3.2 Playfields/Court

Clean of courts before play – check for slippery spots or debris. Play on a clean, dry, safe surface.

3.3 Playing Kit and Protective

Wear supportive playing kit and shoes with skid-resistant soles and have high tops. Use a mouth



guard, ankle braces, and safety glasses. Do not wear jewellery.

3.4 Food and Nutrition

Maintain balance diet with carbohydrates, proteins, fats, vitamins, and minerals. Hydrate adequately. Waiting until you are thirsty is often too late to hydrate properly. If you are injured, take the time needed to heal before you return to sports.

3.5 Techniques and Tactics

Use good technique and use tactics at the time of neck-to-neck situation game playing and follow the rules and regulations of the game.

4. HEALING MEASURES

Minor injuries, such as mild tissue, sprain, and strains, can often be initially treated at home/sports academies/ hostels using PRICE therapy for 3 or 4 days.

4.1 Price

Stands for protection, rest, ice, compression, and elevation.

4.2 Protection

Protect the affected area from further injury, for example, using a support.

4.3 Rest

Avoid exercise and reduce your daily physical training. Using crutches or a walking stick may help if you cannot put weight on your ankle or knee. A sling may help if you had injured your shoulder.

4.4 Ice

Apply an ice pack to the affected area for 15–20 min every 2–3 h. A bag of frozen peas, or similar, will work well. Wrap the ice pack in a towel so that it did not directly touch your skin and cause an ice burn.

4.5 Compression

Use elastic compression bandages during the day to limit swelling.

4.6 Elevation

Keep the injured body part raised above the level of your heart whenever possible. This may also help reduce swelling.

5. USE PAIN RELIEFS

Painkillers, such as paracetamol, can be used to help ease the pain. Ibuprofen and other non-steroidal anti-inflammatory drugs tablets or creams can also be used to ease pain and reduce any swelling. Aspirin should not be given to children under 16 years old.

6. IMMOBILIZATION

Immobilization can sometimes help prevent further damage by reducing movement. It can also reduce pain, muscle swelling, and muscle spasm. For example, slings, splints, and casts may be used to immobilize injured arms, shoulders, wrists, and legs while you heal. If you have a sprain, prolonged immobilization is not usually necessary, and you should try gently moving the affected joint as soon as you are able to do so without experiencing significant pain.

7. PHYSIOTHERAPY

Some people recovering from a long-term injury may benefit from physiotherapy. It is a specialist treatment where techniques such as massage, manipulation, and exercises are used to improve range of motion, strengthen the surrounding muscles, and return the normal function of the injured area. A physiotherapist can also develop an exercise program to help strengthen the affected body part and reduce the risk of the injury recurring.

8. CORTICOSTEROID INJECTIONS

A corticosteroid injection may be recommended if you have severe or persistent inflammation. It can help relieve pain caused by your injury, although for some people, the pain relief is minimal or only lasts for a short period of time. If necessary, a corticosteroid injection can be repeated, but you will usually only be able to have two or three injections a year. Side effects can include thinning of the skin, loss of fat, and infection. The doctor treating you will be able to explain the possible side effects in more detail.

9. SURGICAL AND PROCEDURES

Most sports injuries do not require surgery, but very severe injuries such as badly broken bones may require corrective treatment. This may include a manipulation or surgery to fix the bones with wires, plates, screws, or rods. In some cases, it may be possible to realign displaced bones without needing an operation. Certain other injuries may also occasionally require surgery. For example, an operation may be needed to repair a torn knee ligament.

10. RECOVERY FROM AN INJURY

Depending on the type of injury you have, it can take a few weeks to a few months or more to make a full recovery. You should not return to your previous level of activity until you have fully recovered, but you should aim to gently start moving the injured body part as soon as possible. Gentle exercises should help to improve the area's range of movement. As movement becomes easier and the pain decreases, stretching and strengthening exercises



can be introduced. Make sure you do not try to do too much too quickly because this can delay recovery. Start by doing frequent repetitions of a few simple exercises before gradually increasing the amount you do. In some cases, the help of a professional, such as a physiotherapist or sports injury specialist, may be beneficial. They can design a suitable recovery program and advise you about the exercises you should do and the number of repetitions.

11. CONCLUSION AND RECOMMENDATION

Injuries are unavoidable and will consistently be a piece of the sport of ball. Notwithstanding, with the legitimate preparing early and by going through the essential recovery after wounds, the time misfortune because of wounds can be reduced so players can have the best chance to accomplish the objectives that they have for the season ahead.

- ✚ Give them proper training under trained coaches.
- ✚ Create the knowledge of knee injuries, causes, and types in basketball.
- ✚ Provide them well-developed basketball court with all infrastructures.
- ✚ Encourage them for punctual exercise and healthy diet.
- ✚ Proper exercise lead of exercise should be scientific-based.
- ✚ Follow through of concerned skill should be imported in training.
- ✚ Proper shoes with proper play kit should be used within the practice as well as within competition.

12. REFERENCES

1. James, N. *Inventor of Basketball, History*, Kansas Heritage Group.
2. Miyasaka, K.C., Daniel, D.M., and Stone, M.L. *The incidence of knee ligament injuries in the general population. Am J Knee Surg*, 1991, 4, 43-48.
3. Griffin, L.Y. *Prevention of noncontact ACL injuries. Am Acad Orthop Surg*.
4. Available from: <https://www.nhs.uk/conditions/sports-injuries/treatment>.
5. Dr. Brett Toresdahl, *Common Injuries in Basketball Players, The Playbook*; 2016.
6. Available from: <https://www.seattlechildrens.org/health-safety/keeping-kids-healthy/prevention/basketball-injuries>.
7. *Management and Rehab of SP. Injuries O'Donoghue*; 1984. p. 677.
8. Hutchinson, M., and Ireland, L. *Knee injuries in female athlete. Sports Med*, 1994, 19(4), 298-302.
9. Kulund, D. *The Injured Athlete. United States: Lippincott Williams and Wilkins*; 1982. p. 201.
10. Fedrikson, M. *Common injuries in runner-diagnosis, rehabilitation and prevention. Sports Med*, 1995, 21(1), 142-146.
11. Garrick, J.G., and Webb, D.R. *Sport Injuries-diagnosis and Management. Philadelphia, PA: Saunders*; 1990.



FORMULATION AND EVALUATION OF GEFTINIB POLYMERIC NANOPARTICLES

¹.Dr.G.Jagdish , ².Dr.Vibhor Kumar Jain, ³.Ritesh Patel ,

¹Principal Dbm College of Pharmacy, Janjgir Chattisgarh

²JK institute of Pharmaceutical education and Research Bilaspur Chattisgarh

³Associate Professor, Dbm College of Pharmacy, Janjgir Chattisgarh

ABSTRACT

The aim of this study was to formulate and evaluate nine formulations of GEFTINIB loaded PLGA nanoparticles homogenization followed by solvent evaporation technique by use of biodegradable and biocompatible polymer i.e. PLGA. The effect of different concentrations of polymer and stabilizer (PVA) on particle size, zeta potential, %EE and drug release was studied. PLGA was used in different concentration of 120 mg, 150 mg, and 200 mg. Preformulation studies of FTIR and DSC was done to determine possible interaction between the drug and excipients. A5 showed 75.14% of release after 72 h and followed the fickian diffusion pattern of kinetic. SEM image showed the spherical morphology of nanoparticles.

INTRODUCTION

As mortality due to cancer continues to rise, advances in nanotechnology have significantly become an effective approach for achieving efficient drug targeting to tumor tissues by circumventing all the shortcomings of conventional chemotherapy. During the past decade, the importance of polymeric drug delivery systems in oncology has grown exponentially ¹. In this regard, a wide range of submicron materials has been designed and engineered, especially for defeating cancer. Its applications expedite the development of contrast agents, therapeutics, drug delivery vehicles and theranostics. Nanoparticles for drug delivery applications have been composed of biodegradable and biocompatible polymers based on natural and/or synthetic materials ².

The use of nanocarriers has resolved the undesirable characteristics of anticancer drugs such as low solubility and poor permeability in cells ³. One extensively investigated polymer is poly lactic-co-glycolic acid (PLGA), synthetic thermoplastic aliphatic biocompatible polyester.

There are specific formulations based on PLGA and its related homopolymers, polylactic acid (PLA) and polyglycolic acid (PGA), which have been approved by the US Food and Drug Administration (FDA) for medical applications ⁴.

In the field of controlled drug delivery system, increasing attention is focused on biodegradable polymers such as PLGA because of its biodegradability and biocompatibility ⁵. PLGA nanoparticles are colloidal polymeric drug carriers that hold promise for oral drug delivery which represents by far the most common and convenient route of administration and also offer many advantages over conventional oral dosage forms, such as enhancing the oral bioavailability of those poorly absorbed drugs, protecting the encapsulated drugs in the polymer network ⁶.



In this study, an attempt was made to formulation and characterization of water- insoluble drug i.e. GEFTINIB in the form of PLGA based nanoparticles by use of emulsification followed by homogenization technique. The prepared nanoparticles were characterized with regard to particle size, poly-dispersity index, zeta potential, morphological character, encapsulation efficiency, in-vitro release and kinetic study.

MATERIALS AND METHODS

Geftinib was obtained as a gift sample from Hetero Drugs Limited, Hyderabad, India. PLGA was purchased from Lactel-Durect Corporation, USA. All other ingredients used were of analytical grade.

Preformulation Study: Preformulation studies such as FTIR and DSC were performed to determine the possible interaction between Gefitinib and the excipients used in the formulation of nanoparticles.

Preparation of Nanoparticles: PLGA nano- particles of Gefitini were prepared by homogenization method 7, 8. Preparation of loaded nanoparticles was based on the oil/water emulsification solvent evaporation method. Both polymer and the drug were dissolved in acetone as an organic solvent. The solvent should be organic, miscible in water and easily removed by evaporation 9. The organic phase so formed was added dropwise to an aqueous phase, containing (Polyvinyl alcohol) PVA cold as a surfactant, using a high-speed homogenizer using digital ultra turrax S22 & T25 dispenser in an ice bath at 8000 rpm speed. The emulsion formed was magnetically stirred to evaporate acetone.

After evaporation of the solvent, the nanoparticles were recovered by centrifugation using REMI C- 24BL cold centrifuge. Based on the initial trials formulations were prepared using general full factorial design (Qsutra Minitab 17 software) with two factors and three levels Table 1. Composition of prepared nanoparticles was tabulated in Table 2.

TABLE 1: FACTORIAL DESIGN

Factors	Levels		
PLGA (mg)	120	150	200
PVA (%w/v)	1	1.5	2

Table2: COMPOSITION OF GEFTINIB LOADED PLGA NANOPARTICLES

Formulation	PLGA (mg)	PVA (%w/v)	Organic Solvent (ml)	Tween 80 (%v/v)
A1	120	1%		
A2	150	1.5%		
A3	200	2%		
A4	120	1%		
A5	150	1.5%	5 ml	0.2%
A6	200	2%		
A7	120	1%		
A8	150	1.5%		
A9	200	2%		

Evaluation of Nanoparticles: The supernatant was collected after centrifugation and used for the determination of % encapsulation efficiency (%EE)

¹⁰. Particle size distribution, polydispersity index, and zeta potential of all formulations was measured by dynamic light scattering using Malvern nano ZS-90.

$$\%EE = (\text{Total drug added} - \text{Drug present in the supernatant}) / \text{Total drug added} \times 100$$

In-vitro Release Study: *In-vitro* diffusion studies for Gefitinib loaded nanoparticles were carried out by using the dialysis bag technique ^{11, 12, 13}. The compartment was under continuous stirring at 37 °C

± 0.5. The drug which diffuses from nanoparticles in phosphate buffer saline was periodically withdrawn and the same amount was replaced with fresh phosphate buffer saline (pH 7.4). The absorbance of samples was analyzed by UV spectrophotometer using Agilent Technologies Cary 60 UV-Vis at 332 nm.



In-vitro Kinetic Study: The dissolution profile of all formulations were fitted to zero order, first order, Higuchi and Korsmeyer-Peppas model to ascertain the kinetic modeling of the drug release 14-17

Surface Morphology: Morphology of the prepared PLGA nanoparticle was observed by scanning electron microscope (SEM).

RESULTS AND DISCUSSION

FTIR Spectroscopy: FTIR spectra of Gefitinib and the mixture of Gefitinib, PLGA and PVA showed that there was no possible interaction between the drug, polymer, and stabilizer used in the nano-particle formulation. It is shown in Fig. 1.

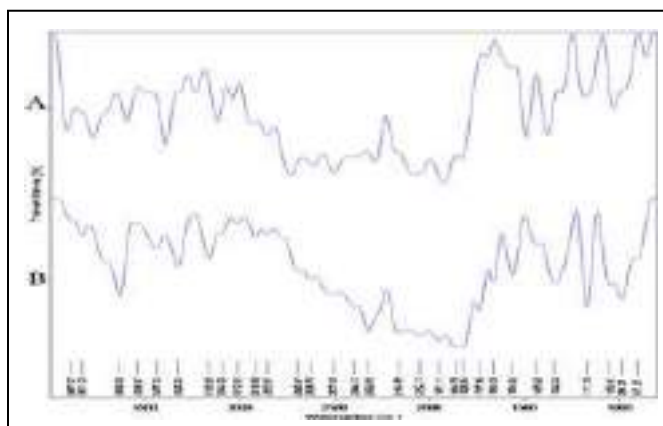


FIG.1:FTIR SPECTRA OF GEFTINIB LOADED PLGA NANOPARTICLES. A: Gefitinib. B: PHYSICAL MIXTURE OF Gefitinib + PLGA + PVA

Differential Scanning Calorimetry (DSC): The DSC thermogram of Gefitinib, PLGA and PVA showed that there is no significant interaction between the drug, polymer and stabilizer used in the formulation of nanoparticles. The thermogram is shown in Fig. 2.

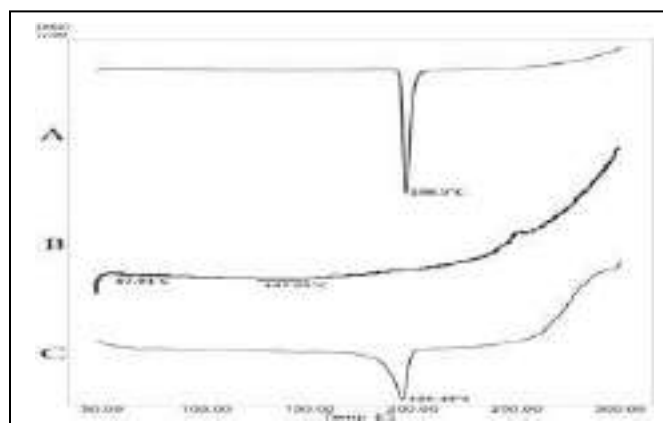


FIG. 2: DSC THERMOGRAM OF GEFTINIB. B: DSC THERMOGRAM OF PLGA. C: DSC THERMOGRAM OF PHYSICAL MIXTURE OF Gefitinib + PLGA + PVA



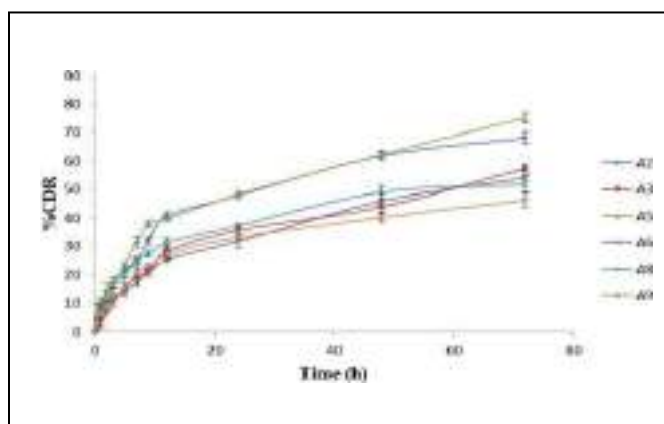
Evaluation of the Nanoparticles: %EE, mean particle size, PDI and zeta potential of the prepared nanoparticles are shown in Table 3. The amount of drug with respect to the concentration of the PLGA nanoparticles had a significant effect on the loading efficiency. It was observed that an increase in the amount of polymer and concentration of stabilizer yields to increase in the amount of % EE. An increase in the size of nanoparticles with the increase in concentration of PLGA and PVA was observed. It was observed that by increasing the concentration of PVA as a stabilizer, zeta potential value got decreased. The reason is maybe due to presence of PVA at the surface of nanoparticles, it acts as a shield between nanoparticles and surrounding medium¹⁸. PDI value for all the prepared formulations found to be less than 0.3, indicating homogeneity of all formulations^{19, 20}.

TABLE 3: EVALUATION PARAMETERS OF GEFTINIB LOADED PLGA NANOPARTICLES

Formulation	EE(%) ±SD	Particle Size (nm) ±SD	PDI ±SD	Zeta Potential (mV) ±SD
A1	20.30 ± 0.44	299 ± 16.99	0.13 ± 0.03	-8.45 ± 0.61
A2	58.61 ± 0.81	340 ± 7.80	0.15 ± 0.02	-2.98 ± 0.16
A3	62.91 ± 0.64	469 ± 7.99	0.20 ± 0.03	-2.99 ± 0.02
A4	49.96 ± 0.88	340 ± 6.34	0.11 ± 0.01	-3.44 ± 0.23
A5	64.37 ± 0.24	446 ± 3.71	0.14 ± 0.03	-2.50 ± 0.11
A6	71.46 ± 1.27	568 ± 1.49	0.21 ± 0.01	-3.26 ± 0.39
A7	52.19 ± 1.63	330 ± 2.66	0.19 ± 0.07	-2.40 ± 0.51
A8	58.54 ± 0.48	471 ± 3.27	0.21 ± 0.01	-2.05 ± 0.04
A9	73.18 ± 0.71	604 ± 6.48	0.14 ± 0.02	-1.42 ± 0.17

Mean ± SD

In-vitro Release Study: Release study was carried out for the formulations bearing % EE more than 55% for 72 h which shown in the following Fig. 3. A5 showed a higher release rate of 75.14 after 72 h. The release profile showed the initial burst release of $7.53\% \pm 2.12$ for A5 which can be due to rapid dissolution of the adsorbed drug. After that, the slow release was observed on increasing the time duration and could be due to the penetration (diffusion) of release medium into the nanoparticles and dissolves the entrapped drug. A9 slow release rate was observed with results in an increase in the concentration of PLGA leads to tight and increase in the polymeric matrix around the entrapped drug.

**FIG. 3: CUMULATIVE DRUG RELEASE STUDY OF PLGA NANOPARTICLES (A2, A3, A5, A6, A8, A9)**

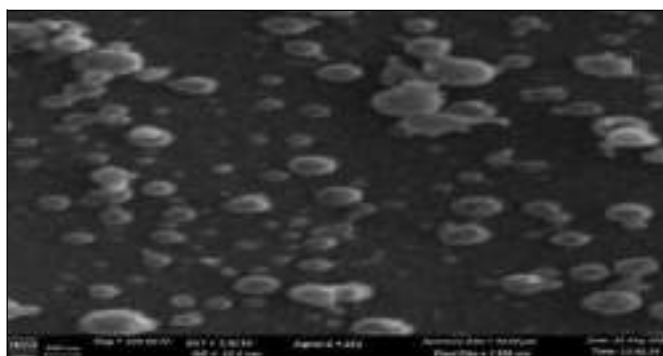
Drug Release Kinetic: The drug diffusion profiles of all formulations were fitted into various kinetic modeling. From the result, it was obtained that all formulations were more linear towards Higuchi model with an R² value of range 0.948 to 0.986 indicating that the drug release mechanism is by diffusion.

In Korsmeyer-Peppas model, the n values for all formulations were found to be close to 0.5 indicates fickian diffusion²¹.

**TABLE 4: RELEASE KINETIC DATA OF GEFTINIB LOADED PLGA NANOPARTICLES**

Formulations	Zero Order R ²	First Order R ²	Higuchi R ²	Korsmeyer-Peppas n Value
A2	0.811	0.913	0.965	0.458
A3	0.881	0.943	0.986	0.497
A5	0.831	0.946	0.973	0.472
A6	0.885	0.941	0.989	0.469
A8	0.770	0.849	0.948	0.498
A9	0.791	0.849	0.975	0.518

SEM: Scanning electron microscope (SEM) was used to determine the surface topography of the GEFTINIB loaded PLGA nanoparticles. The result is shown in Fig. 4. It was observed that the nanoparticles are spherical in shape with no agglomeration.

**FIG. 4: SEM OF GEFTINIB LOADED PLGA NANOPARTICLES IN 100KX**

For providing the facilities required for this project and their continuous support and inspiration.

CONCLUSION

Nine formulations of Gefitinib loaded PLGA nanoparticles were prepared and evaluated. The best release pattern was obtained in A5 where 150 mg of PLGA and 1.5% w/v of PVA were used. The release pattern was best fitted to fickian diffusion, and sustained release drug delivery was obtained which could be applicable for cancer treatment.

REFERENCES

1. Acharya S and Sahoo SK: PLGA nanoparticles containing various anticancer agents and tumour delivery by EPR effect. *Advance Drug Delivery Reviews* 2011; 18: 170-83.
2. Lai P, Daeer W, Lobenberg R and Prenner EJ: Overview of the preparation of organic polymeric nanoparticles for drug delivery based on gelatine, chitosan, poly(D, L-lactide-co-glycolic acid) and polyalkylcyanoacrylate. *Colloids and Surfaces B: Biointerfaces* 2014; 118: 154-63.
3. Khan I, Gothwal A, Sharma AK, Kesharwani P and Gupta L and Iyer AK: PLGA nanoparticles and their versatile role in anticancer drug delivery. *Critical Reviews in Therapeutic Drug Carrier System* 2016; 33: 159-93.
4. Rezvantalab S, Drude NI, Keshavarz MM, Guvener N, Koons EK and Shi Y: PLGA-based nanoparticles in cancer treatment. *Frontiers in Pharmacology* 2018; 9: 1260.
5. Lamprecht A, Ubrich N, Yamamoto H, Schafer U, Takeuchi H and Maincent P: Biodegradable nanoparticles for targeted drug delivery in treatment of inflammatory bowel disease. *Journal of Pharmacology and Experimental Therapeutics* 2001; 299: 775-81.
6. Li X, Xu Y, Chen G, Wei P and Ping Q: PLGA nanoparticles for the oral delivery of 5-Fluorouracil using high pressure homogenization emulsification as the preparation method and in-vitro/in-vivo studies. *Drug Development and Industrial Pharmacy* 2008; 34:107-15.



7. Sharma N, Madan P and Lin S: *Effect of process and formulation variables on the preparation of parenteral paclitaxel-loaded biodegradable polymeric nanoparticles: A co-surfactant study.* *Asian Journal of Pharmaceutical Sciences* 2016; 11: 404-16. Nagavarma B, Hemant K, Ayaz A, Vasudha L and Shivakumar G: *Different techniques for preparation of polymeric nanoparticles-a review.* *Asian Journal of Pharmaceutical and Clinical Research* 2012; 5: 16-23.
8. Thioume O, Fessi H, Devissaguet J and Puisieux F: *Preparation of pseudolatex by nanoprecipitation: influence of the solvent nature on intrinsic viscosity and interaction constant.* *International Journal Pharmaceutics* 1997; 146: 233-38.
9. Chen Y, Zhang W, Huang Y, Gao F and Xianyi S: *Pluronic based functional polymeric mixed micelles for co delivery of doxorubicin and paclitaxel to multidrug resistant tumour.* *International Journal of Pharmaceutics* 2015; 488: 44-58.
10. Yan GP, Zong RF, Li L, Fu T, Liu F and Yu XH: *Anticancer drug loaded nanospheres based on biodegradable amphiphilic ϵ -caprolactone and carbonate copolymers.* *Pharmaceutical Research* 2010; 27: 2743-52.
11. Chidambaram N and Burgess DJ: *A novel in-vitro release method for submicron sized dispersed systems.* *AAPS Pharm Sci* 1999; 1: 32-40.
12. Kumaresan C and Satishkumar K: *Development of an inhaled sustained release dry powder formulation of salbutamol sulphate, an anti-asthmatic drug.* *Indian Journal of Pharmaceutical Sciences* 2016; 78: 136-42.
13. Arifin DY, Lee LY and Wang CH: *Mathematical modeling and simulation of drug release from microspheres: Implications to drug delivery systems.* *Advance Drug Delivery Reviews* 2006; 58: 1274-25.
14. Dash S, Murthy PN, Nath L and Chowdhury P: *Kinetic modeling on drug release from controlled drug delivery systems.* *Acta Poloniae Pharmaceutica Drug Research* 2010; 67(3): 217-23.
15. Gautam S and Mahaveer S: *Review: in-vitro drug release characterization models.* *International Journal of Pharmaceutical Research* 2011; 2: 77-84.
16. Higuchi T: *Mechanism of sustained action medication, Theoretical analysis of rate release of solid drugs dispersed in solid matrices.* *Journal of Pharmaceutical Sciences* 1963; 52: 1145-49.
17. Anudeep B, Ashwini HM and Goli D: *Fabrication of PLGA nanoparticles of ropinirole HC by emulsion solvent evaporation technique to target brain.* *Word Journal of Pharmaceutical Research* 2018; 7: 455-69.
18. Worldwide, M.I. *Dynamic Light Scattering, Common Terms Defined; Inform White Paper; Malvern Instruments Limited; Malvern, UK, 2011; 1-6.*
19. Nobbmann U and Morfesis A: *Light scattering and nanoparticles.* *Materials Today* 2009; 12:52-54.
20. Gouda R, Baishya H and Qing Z: *application of mathematical models in drug release kinetics of carbidopa and levodopa ER tablets.* *Journal of Developing Drug* 2017; 6: 2.



COVID-19 MOST AFFECTED COUNTRIES – A DIVERSE APPROACH

Dr. Kannamani Ramasamy^{1*}, Jayakumar. S²

¹Independent Researcher, Alumnus of JAIN University, Bangalore.

²Independent Researcher, Alumnus of Anna University, Chennai.

ABSTRACT

The second wave of COVID-19 is spreading in many countries badly. There are various initiatives by the WHO and medical authorities of respective countries to control the spread including vaccination. Countries with a mass population and also, countries with less population are affected with no partiality. Impact calculation is a critical factor in the pandemic. Currently, the USA, India and Brazil are the most affected countries based on the cumulative cases. It is imperative to do the proportion-based analysis to know the actual situation of the COVID-19 for the affected countries. In this paper, we discuss the confirmed cases and death cases analysis based on various proportional based ranking and explore the countries that are impacted with more cases and death count.

KEYWORDS: COVID-19, Impact, Deaths, Population, Proportion.

INTRODUCTION

Coronaviruses (CoV) are a large family of viruses that cause various health issues ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome. Coronavirus was discovered in December 2019 and hence it is named as COVID-19. The major symptoms of COVID-19 include fever, cough, headache, and difficulties in breathing. In worst cases, the virus can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. Regular handwashing, covering the mouth and nose when coughing and sneezing are the best ways to protect ourselves from the affected people. It is advisable to maintain social distancing to avoid the spread of the virus. As of 11 May 2021, there are 158.65 million confirmed cases and 3.29 million deaths across the world¹. As of 9 May 2021, a total of 1206 million vaccine doses have been administered. The USA (32.4 million cases), India (23 million cases) and Brazil(15 million cases) are the topmost affected countries in the world. Most of the states

were affected in India and currently, Maharashtra, Karnataka, Tamilnadu, Delhi and Kerala are the most affected states².

CONCEPTUAL APPROACH

As per WHO and other health authorities, the USA and India are the most affected countries. It is true, in terms of the number of COVID-19 cases. It is a usual approach of looking at the highest number of COVID-19 affected countries for ranking purpose. But when we look in detail, the actual statistics are different. Conceptually, losing 10, out of 100 and losing 10 out of 1000 is not the same. There is a huge proportional difference. To understand and estimate the actual impact, we need to go ahead with the proportion-based calculation and based on that we need to see the current impact on various areas. We consider Top-30 affected countries as per the list by WHO and listed Top-15 countries in each category. This discussion happens based on the data from the World health organization, as of 5th May 2021.



Rank	Country	Cases - a cumulative total
1	USA	32083656
2	India	20282833
3	Brazil	14754910
4	France	5563694
5	Turkey	4875388
6	Russian Federation	4831744
7	UK	4420205
8	Italy	4044762
9	Spain	3514942
10	Germany	3425982
11	Argentina	3005259
12	Colombia	2893655
13	Poland	2805756
14	IRAN	2555587
15	Mexico	2348873

Table 1 - Top 15 COVID-19 affected countries across the world

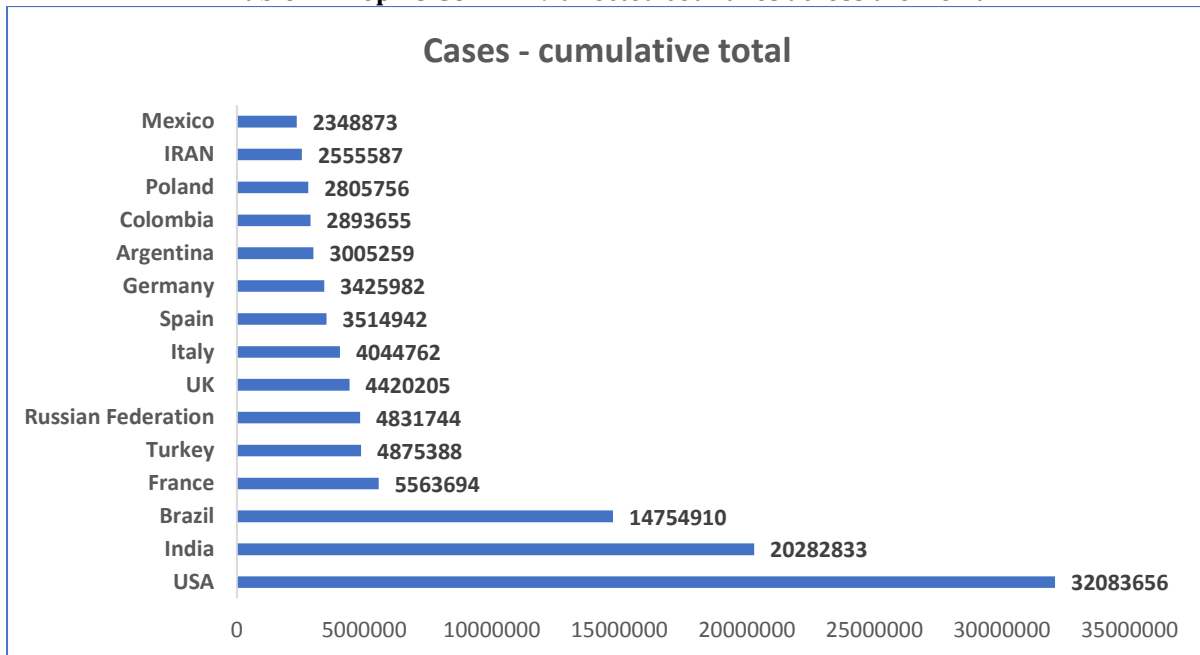


Figure 1 - Top 15 COVID-19 affected countries across the world

1. Death rate- newly reported in last 7 days per 100000 population

Brazil, Peru, and Poland are the countries that are reported a high number of deaths, in terms of deaths in the last 7 days per 100000 population. Countries that are ranked as the most affected countries based

on cumulative cases are not on this list. Turkey, Germany, and Belgium are the least affected countries in terms of mortality rate reported in the last 7 days, among the 15 topmost affected countries as per WHO. We do not see the USA and India, anywhere on this list.

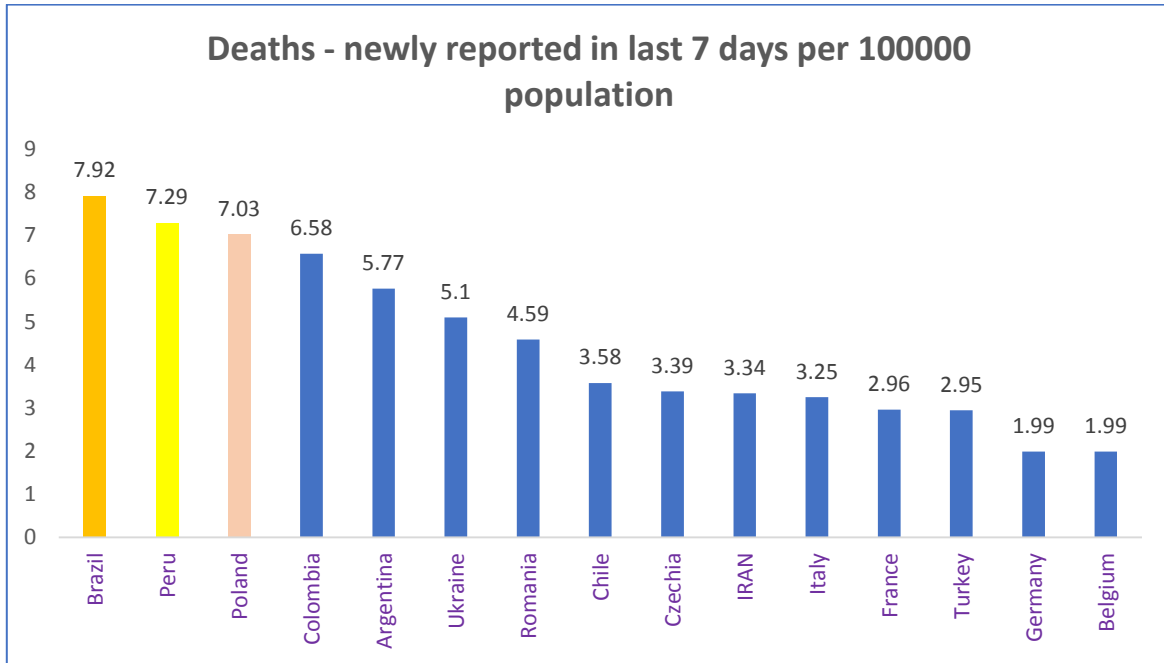


Figure 2 - Top 15 COVID-19 affected countries, ranking based on Death rate- newly reported in last 7 days per 100000 population

2. Death counts - newly reported in last 7 days

In terms of the highest number of death count in the last 7 days, India, Brazil, and the USA are the top

three affected countries. The difference between Brazil (16842) and India(24514) is huge. Similarly, there is a considerable amount of difference between the USA (4898) and Brazil (16842).

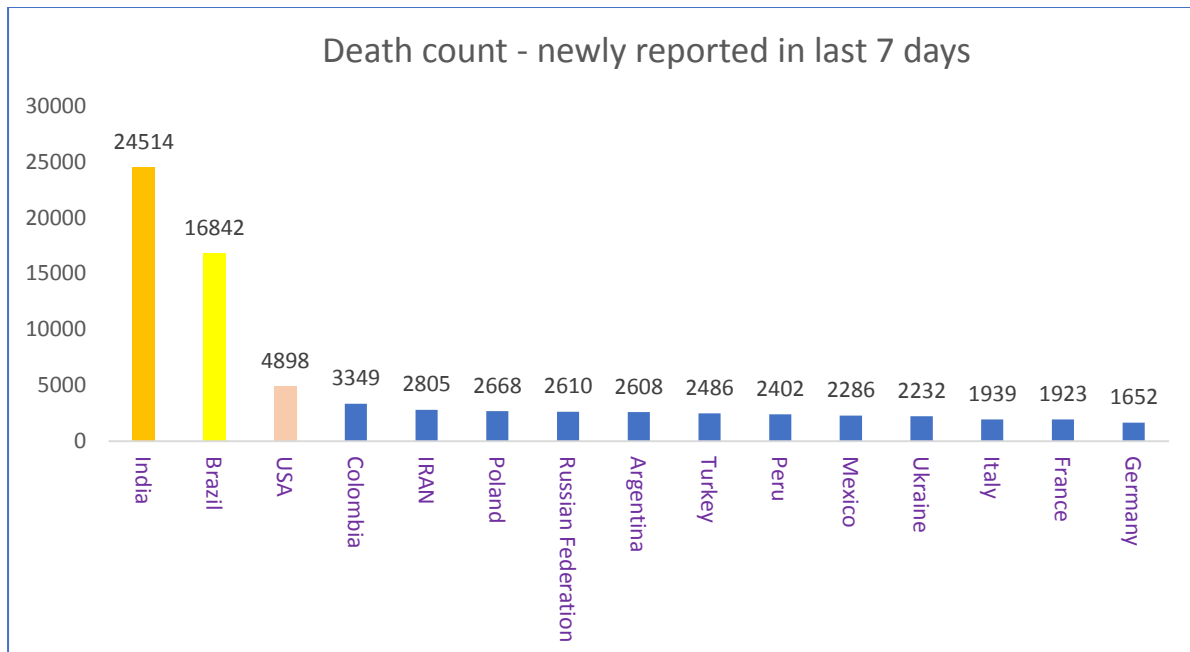


Figure 3 - Top 15 COVID-19 affected countries, ranking based on Death count - newly reported in last 7 days



3. Death rate - cumulative total per 100000 population

In terms of cumulative death per 100000 population, the USA is in 7th place. Czechia, Belgium, and Italy are in the top 3 affected countries. Colombia, Romania, and Argentina are the least affected

countries from the top 15 affected countries. Initially, Italy was one of the highly affected countries and that impact is still keeping Italy in the top 3 countries. Actually, this is one of the considerable methods of calculating the actual death impact. Proportion based on the population can reveal the truth.

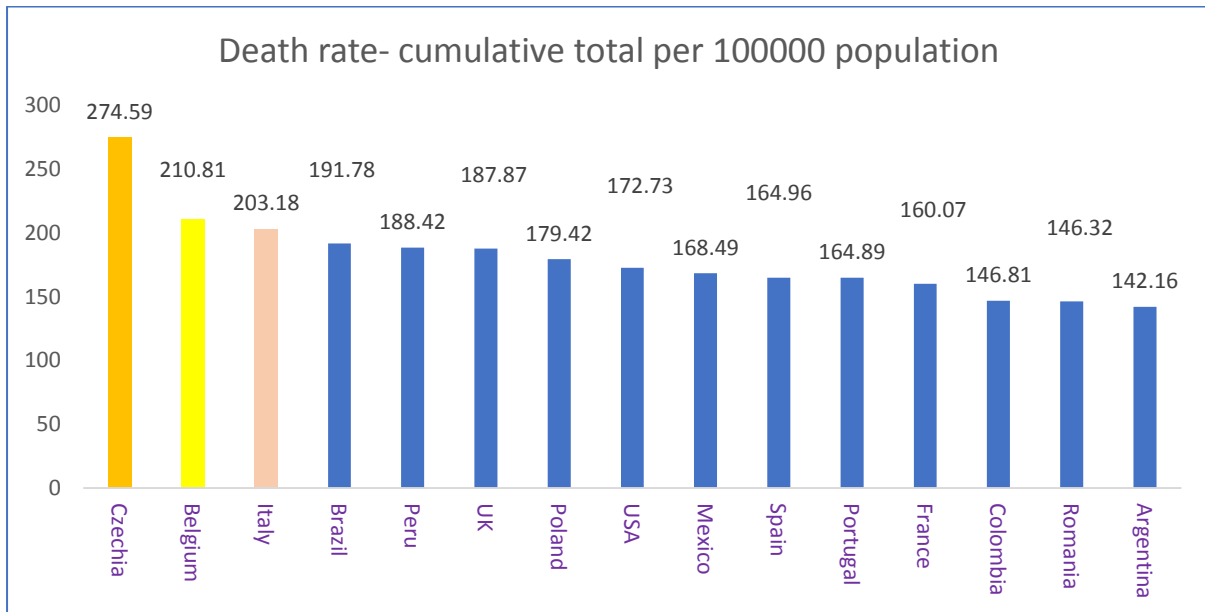


Figure 4 - Top 15 COVID-19 affected countries, ranking based on Death rate - cumulative total per 100000 population

4. Death count - a cumulative total

The USA, Brazil and India are standing in the top 3 positions in this category. The death count of the USA is almost three times that of India (571740). Though the population of Brazil is less the death

count is 407639. Peru, Argentina, and Poland are the least affected countries in terms of death count (cumulative total) among the 15 countries that are in the scope of this study.

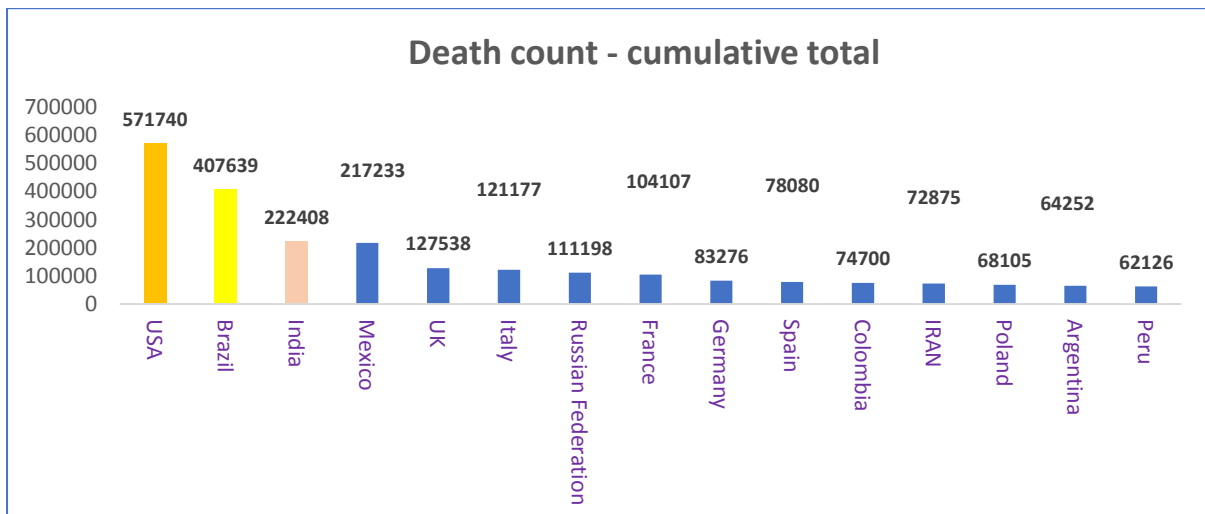


Figure 5 - Top 15 COVID-19 affected countries, ranking based on Death count - a cumulative total



5. Confirmed positive cases - Reported in last 7 days per 10000 population

When we look at the confirmed cases globally, based on the population, Argentina, Turkey, and the Netherlands are the most affected countries. As per WHO, the USA is the highly affected country, in

terms of the number of confirmed cases but when this is calculated based on the proportion to population, the USA is not listed in the top 15 affected countries and India is ranked at 9th level, whereas India is ranked at 2nd place as per WHO. This proportional ranking is important to reveal the actual impact.

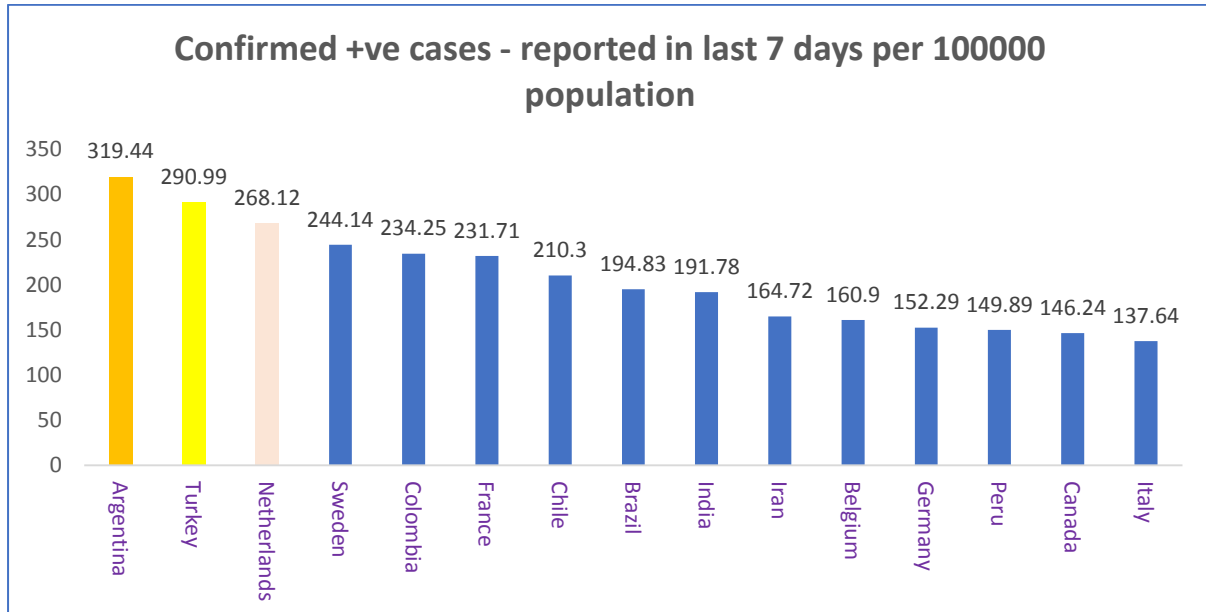


Figure 6 - Top 15 COVID-19 affected countries, ranking based on confirmed cases - reported in last 7 days per 10000 population

6. Confirmed positive cases - reported in last 7 days

The numbers in this category indicate that India is the most affected country in the last 7 days. 26.4 million cases reported in the past 7 days (as of 4 May 2021). Brazil is in second place with 4 million cases and the USA is in 3rd place with 3 million cases. The number

of cases in India is 6 times higher than in Brazil and 9 times higher than in the USA, in terms of the number of cases reported in the last 7 days. Since the second wave is spreading badly in India, because of its high population, population density and violating the advisories are boosting the number of confirmed cases.

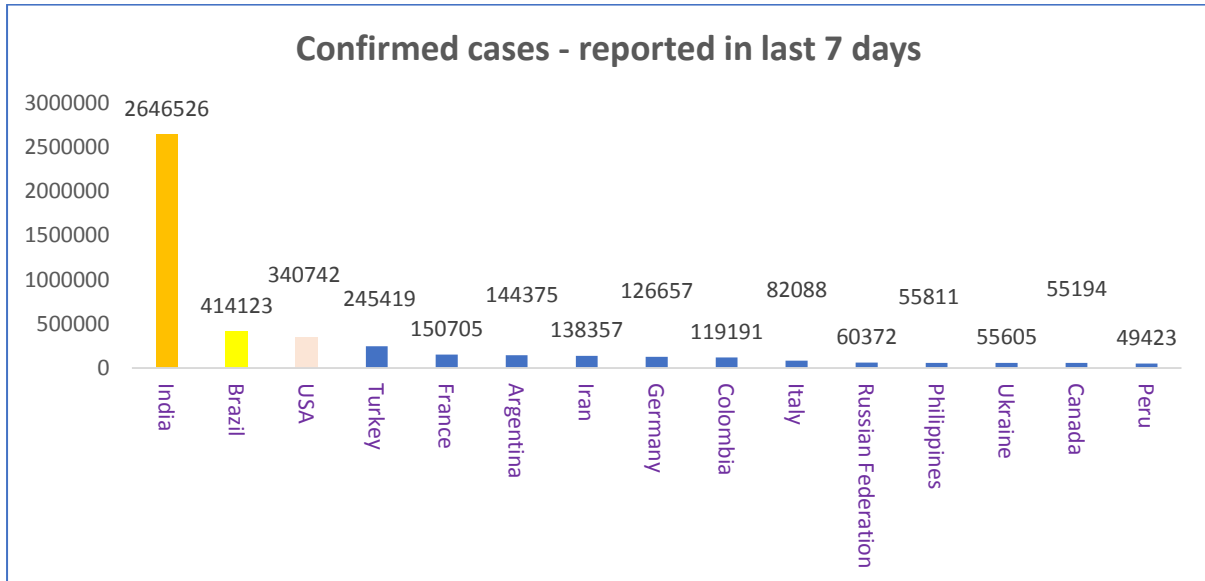


Figure 7 - Top 15 COVID-19 affected countries, ranking based on confirmed cases - reported in last 7 days.

7. Confirmed positive cases - cumulative total per 100000 population

When we calculate the rank of total cumulative cases per 100000 population, Czechia, USA, Israel are in the top 3 places. Though India is listed as the second most affected country based on the number of confirmed cases, India is not in the top 15 most

affected country in this category. Indeed, the number of cases is high in India, medical authorities are struggling to control the spread and count, however, proportionally the impact is less in India in terms of the overall population vs the cumulative confirmed cases. At this point, India may not be on the list, but if the spread goes at the current speed, no need to surprise that India can be part of even this list.

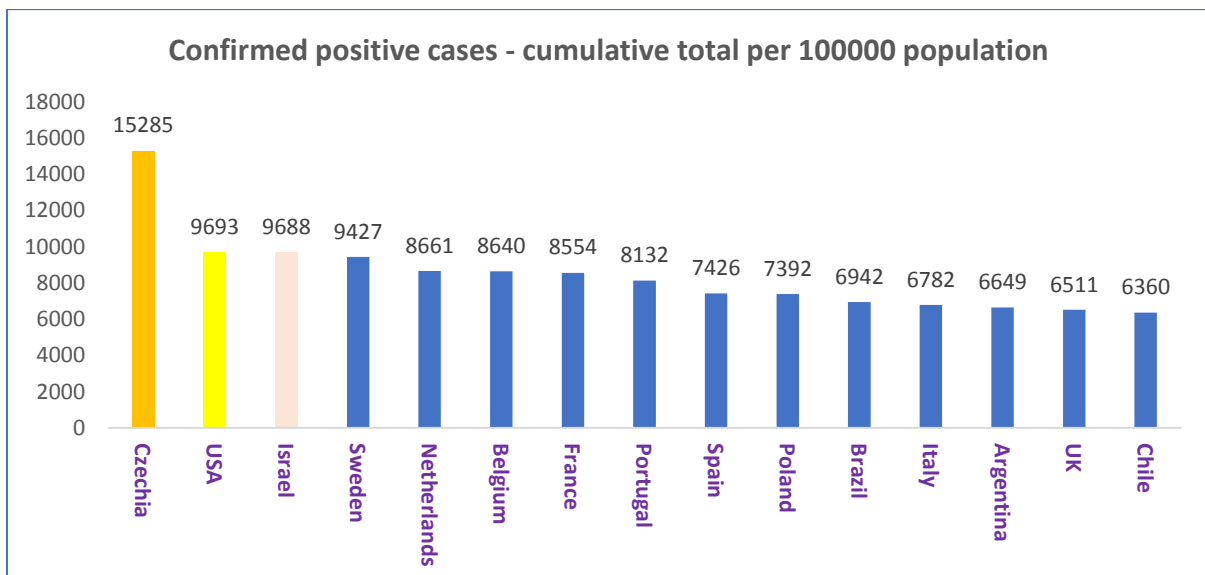


Figure 8 - Top 15 COVID-19 affected countries, ranking based on confirmed positive cases - cumulative total per 100000 population

CONCLUSION

There are various ways to calculate the impact due to COVID-19. Currently, WHO lists the

countries based on the cumulative confirmed cases. WHO and other medical authorities can opt for the proportionally based calculation to know the actual



COVID-19 situation of any country. By using the proportionally based calculation, the impacted countries (regional pandemic management) can plan for mitigating COVID-19, however, the conventional method of ranking the countries can help for global pandemic management by knowing the countries that are impacted with the high number of cases. It is not easy to conclude which is the best way to calculate, however, both the methods are needed for better prediction and the enhanced pandemic management control can be in place to reduce the impact. Taking vaccination as quick as possible and following precautionary measures are the best ways to prevent or control the pandemic.

15. Kannamani R, Jayakumar S, Somasundaram M. *Enchanted Improvements in Air Quality across India - A Study from COVID-19 Lockdown respective*. *Adalya J*, 2020;9(5):101-125.

REFERENCES

1. *COVID-19 dashboard*, World Health Organization, <https://covid19.who.int/>, retrieved on 12 May 2021.
2. *COVID-19 dashboard*, Ministry of health and family welfare, <https://www.mohfw.gov.in/>, retrieved on 12 May 2021.
3. Kannamani R, Jayakumar S. *Where is India heading in COVID-19? : Future state and management analysis*. *Adalya Journal*. 2020;9(6):292-303.
4. Kannamani R, Jayakumar S. *The Trend of COVID-19 at Bengaluru: Prediction to Continue the Better Epidemic Management*. *International Journal of Current Research and Review*. 2020;12(13): 56-60
5. Kannamani R, Sudershan R. *The significant challenges in Bangalore - An introspection*. *Adalya Journal*. 2020;9(6) : 228-247.
6. Kannamani R. *COVID-19 Pandemic: India is Heading Towards the First Place*. *International Journal of Current Research and Review*. 2020;12(21): 117-125
7. Kannamani R, Jayakumar S. *COVID-19 Outbreak at Mumbai City: Disaster Management Analysis*. *Journal of the Social Sciences*, 2020; 48: 810-828.
8. Kannamani R. *India's Capital Delhi Fighting with COVID-19: A Comprehensive Study*. *Research Review International Journal of Multidisciplinary*. 2020;5(7):90-110.
9. Kannamani R. *COVID-19 Situation at Chennai City – Forecasting for the Better Pandemic Management*. *International journal of current research and review*, 2020;12(12): 37-47.
10. Kannamani R, Jayakumar S. *COVID-19 Pandemic: Global Disaster Management Review*. *Journal of the Social Sciences*, 2020; 48:1138-1154.
11. Kannamani R, Sudershan L, Jayakumar S. *India Vs Italy: COVID-19 Epidemic Management Analysis*. *Journal of the Social Sciences*, 2020; 48: 844-856.
12. Kannamani R, Jayakumar S. *COVID-19 Impact on Managing School Education: A Critical Review of Online Class from Parents Perspective*. *J. Social Sci*.2020;48:1475-1490.
13. Kannamani R. *Impact Analysis in Banking, Insurance and Financial services industry due to COVID-19 Pandemic*. *Pramana Research Journal*. 2020;10(8):19-29.



A STUDY ON CONSUMER SATISFACTION TOWARDS ROYAL ENFIELD USERS IN COIMBATORE CITY

Muthu Gowtham P¹, Mr. P Vimal Kumar²

¹Student, Dr. N.G.P Arts And Science College, Coimbatore.

²Assistant Professor (SG), Dr. N.G.P Arts and Science College, Coimbatore-048.

ABSTRACT

The purpose of this study on customer satisfaction will help us to understand the needs & Wants of the customers towards Royal Enfield. The study could provide appropriate and timely information about the position of preference level of customer towards Royal Enfield. As the objectives of this study is to analyze the customer satisfaction and to find out the consumer preference towards the iconic brand Royal Enfield. This study also investigate the services and factors which influence the customers to purchase the Royal Enfield bikes and also identify what customers are expecting from the Royal Enfield. To know about the customer satisfaction and factor which influence the customer's preference in buying decision process. Customer satisfaction is influenced strongly by culture, social, personal and psychological factors. For this purpose, 75 customers were selected and obtained the various responses based on the questionnaire method. By and large it was found that most of the customers are choosing Royal Enfield vehicles because of its Vehicle Appearance, pickup, good models and engine appearance etc.

KEY WORDS: Royal enfield, customer satisfaction,

INTRODUCTION

Royal Enfield one of the popular brand and highest selling bike in India and outside India Royal Enfield motorcycles had been sold in India from 1949. In 1955, the Indian government looked for a suitable motorcycle for its police and army for use patrolling the country's border. Marketing is the process of performing market research, selling products and/or services to customers and promoting them via advertising to further enhance sales. It generates the strategy that underlies sales techniques, business communication, and business developments. It is an integrated process through which companies build strong customer relationships and create value for their customers and for themselves.

Marketing is used to identify the customer, to satisfy the customer, and to keep the customer. With the customer as the focus of its activities, it can be

concluded that marketing management is one of the major components of business management. Marketing evolved to meet the stasis in developing new markets caused by mature markets and overcapacities in the last 2-3 centuries. The adoption of marketing strategies requires businesses to shift their focus from production to the perceived needs and wants of their customers as the means of staying profitable.

The term marketing concept holds that achieving organizational goals depends on knowing the needs and wants of target markets and delivering the desired satisfactions. It proposes that in order to satisfy its organizational objectives, an

SCOPE OF THE STUDY

- This study includes Customer's response and awareness towards the brand, products and services of Royal Enfield.



- The results are limited by the sample size 75 numbers and therefore the opinion of only selected customers is taken into consideration
- Mainly this study is conducted in Coimbatore and the scope is limited.

OBJECTIVES OF THE STUDY

- To understand the reasons for purchasing Royal Enfield bikes.
- To know about the experience after purchase relating various parameters (Service, bike performance, mileage etc).
- To ascertain the barriers to purchasing a Bullet for a prospective customer.
- To ascertain the factors that affects the choice of a Bullet as a motorcycle for common man.
- To propose an effective Promotional campaign plan for brand Royal Enfield.

LIMITATIONS OF THE STUDY

- This research is geographically restricted to Coimbatore city only. Hence the result cannot be extrapolated to other places .
- The study is restricted only to the organized sector of two wheeler industry.
- Sample size was confined to 75 respondents keeping in view of time and cost constraints.
- All interview questions are undisguised or direct. Hence there is a scope for the respondents to be biased or pretentious.
- This project has been taken up at the undergraduate level and the knowledge and experience of the student is limited and hence may not be professional enough.

REVIEW OF LITERATURE

Mrs. R. Kanaka Rathinam (2013) The article provides detailed information about the preference of customer towards Royal Enfield bikes. In this article the author has mentioned how preference is influenced by culture, social, personal and psychological factors lastly with help of questionnaire method it was found that Royal Enfield is chosen by most of customers because of appearance, performance, and design. Bryant et al. (2019)

Mr. FAISAL.T (2014) we found out that it was undertaken with the objective of finding out customer's perception level on Royal Enfield bikes. It is felicitously observed from the study that the most customers of Royal Enfield are highly satisfied in almost all areas offered by Royal Enfield. This study shows that by improving fuel efficiency, service and advertisement and by introducing new models capable to compete with the fresher in the market.

Mrs. G. MURALI MANOKARI (2013) Findings from the study of this literature of research shows how much customer prefers and their satisfaction level towards various aspects which are mostly influenced by socio-cultural, psychological & personal factors. Customers of Royal Enfield conveys, that in order to capture the market, the manufacturers have to give the best combination of looks, quality, cost efficiency good features, safety, and performance. This reason has also proved to be the reason behind the decade's long history of the Company.

Tools For Analysis

The tools used for analysis are

- Simple percentage analysis.
- Simple average
- Weighted average
- Rank analysis



**Frequency Table
Simple Percentage**

OCCUPATIONAL STATUS

OCCUPATION	NO.OF RESPONDENTS	PERCENTAGE
STUDENT	33	44%
GOVERNMENTSERVICE	5	6%
EX-SERVICEMEN	3	4%
PROFESSIONAL	21	28%
SELF-EMPLOYED	13	18%
TOTAL	75	100%

From the above table it is clear that 44% of the respondents were students pursuing their graduation or post graduation studies and 28% were professionals. 18% of the respondents were self employed, 4% were

ex - serviceman and 6% belonged to government services.

Majority 44% of the respondents are student

RESPONDENTS PRESENTLY OWN

MODEL	NO. OF RESPONDENTS	PERCENTAGE
BULLET 500	11	14%
THUNDER BIRD	7	10%
BULLET ELECTRA	15	20%
MACHISMO 500	6	8%
BULLET 350	16	21%
CLASSIC 500/350	17	23%
OTHERS	3	4%
TOTAL	75	100%

From the above it is clear that 14% of the respondents own Bullet 500, 10% of them own Thunder Bird, 20% of them own Bullet Electra, 8% of them own Machismo 500, 21% of them own Bullet 350 and 23% of them own Classic 500/350.

Majority 23% of the respondents are classic 500/350.



Simple Average

THE MAJOR PROBLEMS AFTER PURCHASING ROYAL ENFIELD BIKE

PROBLEMS	NO. OF RESPONDENTS	SIMPLE AVERAGE
HIGH MAINTENANCE	11	0.14
POOR AFTER SALES SERVICE	7	0.09
HIGH PRICE	15	0.20
LOW MILEAGE	8	0.10
NOISY VEHICLE	3	0.04
NO PROBLEM	31	0.41
TOTAL	75	1

It is observed from the above table that 0.14 - of the respondents says high maintenance, 0.09 - of the respondents says poor after sales service, 0.20 – of the respondents says high price, 0.10 – of the respondents

says low mileage, 0.04 – of the respondents says noisy vehicle

Majority 0.41- of the respondents says no problem.

Rank Analysis

RANK THE ATTRIBUTES THAT ATTRACT CUSTOMER TOWARDS ROYAL ENFIELD

FACTORS	8	7	6	5	4	3	2	1	TOTAL	RANK
Price	67	17	17	11	6	11	15	6	905	5
	536	119	102	55	24	33	30	6		
Customer support	71	14	8	11	13	12	15	6	893	6
	568	98	48	55	52	36	30	6		
Comfort	84	11	17	11	10	5	6	6	979	2
	672	77	102	55	40	15	12	6		
Attractive	72	19	8	9	21	0	15	6	922	3
	576	133	48	45	84	0	30	6		
Maintenance	84	21	6	17	10	4	4	4	1013	1
	672	147	36	85	40	12	8	13		
Sound	63	21	12	31	0	2	15	6	920	4
	504	147	72	155	0	6	30	6		

The above table result it is found that Price as 5, Customer support as 6, Comfort as 2, Attractive as 3, Sound as 4.

Majority of them said Maintenance as a rank 1.



Weighted Average

FACTORS THAT ATTRACT MORE CUSTOMERS TOWARDS ROYAL ENFIELD

Service	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean score	Mean
Mileage	160	336	72	20	0	588	39.20
Speed	120	192	120	26	25	483	32.20
Sound	55	220	192	40	0	507	33.80
Good customer support	125	336	72	34	0	567	37.80
Good offers	310	192	81	26	0	609	40.60

It is observed from the above table that 39.20 - of the respondents says good Mileage, 32.20 - of the respondents says high speed, 33.80 - of the respondents says Sound, 37.80 - of the respondents says good customer support.

The highest mean score is that 40.60- of the respondents says good offers.

FINDING OF THE STUDY

Simple Percentage Analysis

- Here mostly 44% of the respondent’s age is 20 to 29 years.
- Here majority 55% of the respondents were male.
- Here mostly 43% of the respondents were employees.
- Here majority 50% of the respondents were unmarried.
- Here mostly 39% of the respondents education level is Under graduate.
- Here mostly 44% of the respondent’s income is Rs. 10001 – 20000.
- Here mostly 20% of the respondents have 6 to 7 members in their family.
- Here mostly 44% of the respondents using more than 1 year.
- Here majority 60% of the respondents were spending Rs.1000 weekly.
- Here majority 52% of the respondents say sound is reason to royal enfield.
- Here majority 51% of the respondents say Education.
- Here majority 61% of the respondents say Internet facility.
- Here majority 55% of the respondents say Customer support.
- Here mostly 37% of the respondents say attractive offers.

Simple Average Analysis

- Majority 0.20 - of the respondents says High price,
- Majority 0.10- of the respondents says low mileage,
- Majority 0.41 – of the respondent says no problem.
- Majority 0.14- of the respondents says high maintenance

Rank Analysis

- Majority of them said Good maintenance as a rank 1.
- Majority of them said customer support as a rank 6.

SUGGESTIONS

- Aggressive selling- The Company should follow an aggressive selling concept. A non-aggressive selling concept which is clearly visible in its advertising campaign which does not hit on the customer rather aims to provide information in a subtle manner.
- Promotional campaign- The Royal Enfield ads seen on electronic and print media are absolutely out of touch with the Indian culture and thought process. An Indian consumer irrespective of their income level has a soft corner for traditions and culture of India. Hence, all companies including market leaders like Hero Honda and Bajaj capitalize on this behavior of customers and design their ad campaigns keeping India in mind.
- Weak follow up from dealerships- It was observed during the study that Royal Enfield was quite weak in following up with prospective customers.
- Measures should be taken to improve it s dealership- Showrooms are very small in size and do not reflect the quality and scale of Royal Enfield in the market.



- Should improve the after sales service- During the survey it was found that Royal Enfield is not satisfying all their customers in after sales services, employees at dealership sometimes use harsh words and become.

CONCLUSION

- The study has helped Royal Enfield dealers to understand whether the customers are satisfied or not. If not what are main reasons for dissatisfaction of customer towards the dealer and what are the ways of improving the satisfaction level of customer towards dealer.
- We can conclude younger generation and middle age are more interested in Royal Enfield, the buying behavior is governed predominantly by the need for Power and respect for the iconic Brand and users are mostly Professional Males, 20-35 years of age, including some students. Most of the customers are attracted to newly released

Classic 350/500, also customers are easily affording the price of Royal Enfield bikes and customers are very loyal towards the brand Royal Enfield.

- Royal Enfield should concentrate on its advertising campaign to reach the customers, mileage of the Royal Enfield bikes is very economical and most of them prefer to buy their bike brand new from showroom with the spare parts available in market easily.
- Royal Enfield has an excellent satisfaction level within the customer for its power, pick up, comfort, safety and with after sales service.
- It is clear that Royal Enfield checks at the complaints registered by their customers on regular basis to maintain its brand value and entire Royal Enfield owner are passionate Royal Enfield fans.



A STUDY ON CUSTOMER SATISFACTION TOWARDS FAST MOVING CONSUMER GOODS (FMCG) SPECIAL REFERS WITH COIMBATORE CITY

Hariharan.R¹, Mr. M .R.Chandra Sekar²

¹Student, Department of Commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

²Assistant Professor, Department of commerce, Dr.NGP College of Arts and Science, Coimbatore-48.

ABSTRACT

The consumer behaviour plays an important role in marketing. This influenced by various factors. In the changing global scenario we find that consumers needs and wants to buy a product also changes with it. In this study titled “A Study on Consumer Behaviour towards Selected Fast Moving Consumer Goods in Coimbatore City” the researcher has assessed the socioeconomic profile ,shopping pattern consumer and found out the factors influencing the consumer to purchase the selected FMCG products. The primary data required for the study for collected through questioner which was distributed to 135 samples choose from Coimbatore city .The tools used for analysis are percentage analysis,Garrett ranking and chi-square. From this study it was found that most of the consumers are influenced by brand and quality in purchase of FMCG products. There by the researcher has suggested to improve the quality in FMCG product through product development and external monitoring.

KEYWORDS: FMCG , Consumer Behaviour, awareness, preference.

INTRODUCTION

Globally, India is becoming one of the most attractive markets for foreign FMCG players due to easy availability of imported raw materials and cheap labour costs. The urban segment is the biggest contributor to the growth of India FMCG sector, accounting for around two-thirds of the total revenues. However, the share of semi-urban and rural segments in the country’s FMCG sector is anticipated to increase by the end of 2020.Fast-moving consumer goods (FMCG) can be defined as packaged goods that are consumed or sold at regular and small intervals.

The prices of the FMCG are low and profits earned are more dependent upon the volume sales of the products. The FMCG market can be broadly categorised as Personal Care, Household care, Food & Beverages and Others.The Indian FMCG sector is the fourth largest sector in the economy with a total market size of USD49 billion in 2016. The sector is projected to grow at a CAGR of 20.6% to reach

USD103.7 billion by 2020.The FMCG industry in India, has grown rapidly over the last decade, predominantly on account of increasing income levels and changing lifestyle of Indian consumers. Fast Moving Consumer Goods are inexpensive products that require little shopping efforts and these non-durable products which are sold in packaged forms. These products are purchased by the end-consumer in small quantities and frequently.

- **Personal Care:** It consists of oral care, hair care, skincare, personal wash (soaps), cosmetics and toiletries, deodorants; perfumes; paper products (tissues, diapers, sanitary),shoe care etc.
- **Household Care:** It comprises of fabric wash (laundry)soaps and synthetic detergents); household cleaners (dish/utensil cleaners, floor cleaners, toilet cleaners, air fresheners, insecticides and mosquito repellents, metal polish and furniture polish).



- **Branded and Packaged Food and Beverages:** It consists of health beverages; soft drinks; staples/cereals; bakery products (biscuits, bread, cakes), snack food, chocolates, ice cream, tea, coffee, processed fruits, vegetables and meat, dairy products, bottled water; branded flour, branded rice, branded sugar, juices etc.

HISTORY

Fast moving consumer goods (FMCGs) constitute a large part of consumers' budget in all countries. Retail trade in these products, that is, their supply to household, has attracted considerable interest from consumers and policy-makers because a well functioning retail sector is essential for daily provision of these essential products at high quality and low cost.

Fast Moving consumer Goods are products that have a quick shelf turnover, irrelatively low cost and do not require a lot of thought, time and financial investment to purchase. The margin of profit on every individual FMCG product is less. However, the huge number of goods sold is what makes the difference.

Fast Moving Consumer Goods is a classification that refers to a wide range of frequently purchased consumer products including toiletries, soaps, cosmetics, teeth cleaning products, shaving products, detergents, other non-durables such as glassware, bulbs, batteries, paper products and plastic goods, such as buckets.

FMCG industry, alternatively called as CPG (Consumer packaged goods) industry primarily deals with the production, distribution and marketing of consumer packaged goods. The Fast-Moving

Consumer Goods (FMCG) are those consumables which are normally consumed by the consumers at a regular interval. Some of the prime activities of FMCG industry are selling, marketing, financing, purchasing, etc.

FMCG INDUSTRY ECONOMY

The retail market in India is estimated to reach US\$ 1.1 trillion by 2020 from US\$ 840 billion in 2017, with modern trade expected to grow at 20-25% per annum, which is likely to boost revenue of FMCG companies. Revenue of FMCG sector reached Rs. 3.4 lakh crore (US\$ 52.75 billion) in FY18 and is estimated to reach US\$ 103.7 billion in 2020. FMCG market is expected to grow at 9-10% in 2020. Rise in rural consumption will drive the FMCG market. It contributes around 36% to the overall FMCG spending. In the third quarter of FY20 in rural India, FMCG witnessed a double-digit growth recovery of 10.6% due to various government initiatives (such as packaged staples and hygiene categories); high agricultural produce, reverse migration and a lower unemployment rate.

TOP 5 COMPANIES OF FMCG SECTOR IN INDIA

The following companies play the major role in Indian FMCG industry:

- Hindustan Unilever Ltd.
- ITC (Imperial tobacco company)
- Nestlé
- Dabur
- Britannia Industries

ADVANTAGES IN INDIA





STATEMENT OF THE PROBLEM

FMCG product touches every aspects of human life. These products are frequently consumed by all sections of the society and a considerable portion of their income is spent on these goods. Apart from this, the sector is one of the important contributors of the Indian economy. This sector has shown an extraordinary growth over past few years, in fact it has registered growth during recession period also. The future for FMCG sector is very promising due to its inherent capacity and favorable changes in the environment. In this study, the scholar makes an attempt to analyze the customer perceptions. In this background it is identified that there is a need for research work in the field of consumer behaviour of FMCG in the COIMBATORE CITY.

OBJECTIVES OF STUDY

- To analyze the socio-economic profile of rural consumers.
- To study the concept of FMCG.
- To identify the factors influencing for buying decision of fast moving consumer goods.
- To analyze their attitude towards buying products.

METHODOLOGY OF THE STUDY

Exploratory research design is used for conducting this study. The survey was conducted in Coimbatore city. For the purpose of the study 120 respondents have been chosen in Coimbatore city by using convenient sampling technique. The questionnaire was prepared and administered in person to all the respondents. The study has used both the primary data and secondary data. Secondary data were collected through various journals, magazines, reports and newspapers. The tools used to analyze the data are Simple Percentage Analysis.

SAMPLE DESIGN

Convenient sampling method is adopted for the purpose of study.

DATA COLLECTION

Data was collected to both primary and secondary data source. Primary data was collected through questionnaire. The study was done in the form of direct personal interviews.

Primarily data

Primary data is a data which is collected for the first time for the particular interest to collect more information. In this study, the primary data was collected using questionnaire.

Secondary data

Secondary data consists of information that already exists somewhere, having been collected for

some other purpose. In this study, the secondary data was collected from studies, journals and websites.

PERIOD OF THE STUDY

This study is based on a primary data collection. The study was conducted for a period of three months from December 2020 to February 2021.

TOOLS USED FOR THE STUDY

The rules of statistics in research is to function as a tool in designing research, analyzing the data, drawing its conclusion from most research studies result in large volume of raw data that must be suitable reduced so that the same can be read easily and can be used for future analysis. The tools used for

- Simple percentage analysis
- Weighted average analysis
- Chi-square Test

REVIEW OF LITERATURE

Kavitha and Santhi, (2017) investigated that the factors that influenced the purchase intention of female customers towards skin care products special reference to Perambalur town of Tamilnadu. A total of 60 current customers using cosmetics were approached to collect data, by means of questionnaires. They were analyzed utilizing the descriptive research technique. The research had been conducted to know the peoples expectation and satisfaction towards ponds skin care product. The difficulties faced by the customers with regard to skin care products availability and quality were also inquired into and there by their overall satisfaction level was studied. This was a descriptive research and mainly primary data was used for the purpose of data collection through questionnaire. It was undertaken to determine the customer opinion and behavior of customers, price, quality, brand name were included in the study. Satisfaction level on ponds skin care products. SPSS package program was used to analyze the data.

Bello Ayuba, (2014) observed that this study was an assessment of factors influencing consumer satisfaction; a survey of customers of Nigerian manufacturing companies. The main objective of the study was to investigate the key variables having strong influence on customer satisfaction and purchasing decisions of customers. As part of the methodology, both primary and secondary methods of data collection were adopted for the study. The data was analyzed using Descriptive Statistics (mean, standard deviation) and Regression Analysis to assess the satisfaction-rating in line with the objectives of the study. The major findings based on the formulated hypotheses reveals that most of the targeted consumers of the surveyed manufacturing companies in the six geo-political zones of the country agreed that high



pricing dimension of Nigerian manufacturers" products result in low-level customer satisfaction as consumers derive maximum satisfaction from a fair price, while effective customer services do not necessarily enhance customer satisfaction and increase in the number of satisfied customers. Some recommendations were made; among the major recommendations is the need for manufacturing companies in Nigeria

to embrace the marketing concepts, by providing the much needed services and establishing good relationship with customers through effective and efficient customer services. This would result in brand loyalty and deeper market penetration that would help companies establish long term profitable relationships with their customers.

SIMPLE PERCENTAGE ANALYSIS PURCHASE FROM

S.No	Purchase from	No. of respondents	Percentage (%)
1	Departmental store	66	49
2	Super market	21	16
3	Convenient store	22	16
4	D mart	26	19
	TOTAL	135	100

Source: Primary Data

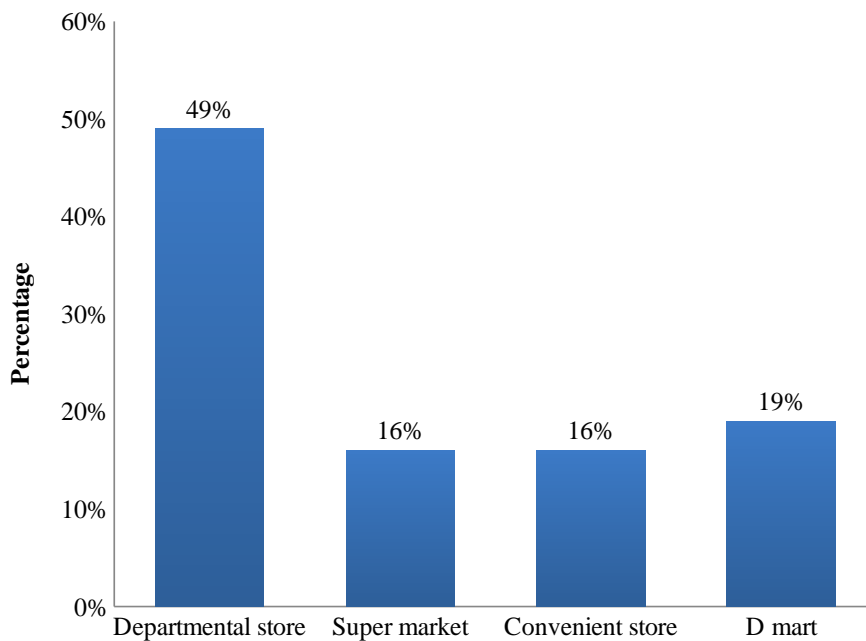
INTERPRETATION

From the above table, it is found that 49% of the respondents purchase from departmental store, 16% of the respondents purchase from super market, 16% of the respondents purchase from convenient store

and remaining 19% of the respondents purchase from d mart.

Here majority 49% of the respondents purchase from departmental store.

PURCHASE FROM





**WEIGHTED AVERAGE ANALYSIS
PREFERRED BRAND CATEGORY**

Category	5	4	3	2	1	Total score
Skin care	19	48	40	28	0	135
Haircare	27	55	10	28	15	135
Detergent powder	20	25	66	18	6	135
Toilet soap	28	37	47	8	15	135
Tooth paste	22	31	56	10	16	135
Cold drinks	18	32	46	20	19	135

Category	5	4	3	2	1	Mean score	Mean	Rank
Skin care	95	192	120	56	0	463	30.87	1
Haircare	135	220	30	56	15	456	30.40	3
Detergent powder	100	100	198	36	6	440	29.33	4
Toilet soap	140	148	141	16	15	460	30.67	2
Tooth paste	110	124	168	20	16	438	29.20	5
Cold drinks	90	128	138	40	19	415	27.67	6

Source: Primary Data

INTERPRETATION

The above table shows skin care ranks 1, toilet soap ranks 2, haircare ranks 3, detergent powder ranks 4, tooth paste ranks 5 and cold drinks ranks 6.

Majority of the respondents say Skin care ranks 1.

CHI SQUARE TEST

CHI-SQUARE TEST TO FIND THE SIGNIFICANT RELATIONSHIP BETWEEN LIKING OF PRODUCT AND DURATION OF USAGE

Null Hypothesis Ho

There is no significant relationship between liking of product and duration of usage

Alternative Hypothesis Ha

There is significant relationship between liking of product and duration of usage

Usage Duration Liking	Last 6 months	6 months to 1 year	1-2 years	More than 2 years	Total
Price	3	1	13	6	23
advertisement	14	16	3	8	41
Features	24	35	1	0	60
Brand	3	8	0	0	11
Total	44	60	17	14	135



Calculated value χ^2	97.84
Degree of freedom	12
Level of significant	50%
Table value	23.589
Result	Reject

INTERPRETATION

Since the calculated value is higher than the table value and our hypothesis is proved, null hypothesis is rejected. Hence alternate hypothesis is accepted. So there is significant relationship between liking of product and duration of usage.

CONCLUSION

In the present competitive business world, the market penetration and customer demand are not simply due to the product features, but due to the effort taken by the dealers to place the product in the hands of the right consumer. For this, dealers and distributors should be properly motivated by the manufacturers through awards and incentives based on their performance. Quantity discounts or trade in allowance should be offered to customers for making bulk purchases (individually or group) of the products of the company. It is recommended that the consumers of the FMCG products should be conscious about the media [especially television advertisement] which certainly do have an undue influence over them in the preference of the FMCG products. Manufacturers should use the retailers like convenience stores, discount stores and off-price leader etc. even though it is not popular in Indian markets. The regular and continuous improvements in the products are necessary after the careful research programmed that definitely not at the cost of the quality and hygiene

REFERENCES

1. Dr.Vibhuti, Dr. Ajay Kumar Tyagi and Vivek Pandey (2014), "A study on Consumer Buying Behaviour towards Selected FMCG Products" *International Journal of scientific research and management (IJSRM) Volume 2, Issue 8, Pages 1168-1182.*
2. Thanigachalam S. (2014), "Consumer Behaviour towards Fast Moving Consumer Goods in Puducherry" *Asia Pacific Journal of Research Vol: I Issue XVIII, October 2014, pp.130-137*
3. Ganesh G. (2015), "Consumers' Perception towards Brand Loyalty of FMCG Products -An Analysis." *Asia Pacific Journal of Research Vol: I. Issue XXX, August 2015*

4. Mahaboob Basha A.M. (2016), "A Study on Consumer Behaviour towards Fmcg Goods an Empirical Study with Special Reference to Nellore District of Andhra Pradesh." *International Conference of Recent innovations in Science Engineering and Management (ICRISEM) August 20, 2016.*



TRANSFORMATIONAL LEADERSHIP IN PRIVATE UNIVERSITIES IN DKI JAKARTA

**I Wayan Sugiana¹, Azlizan Talib²,
Mohd Nazaruddin Yusoff @ Abdul Rahman³**

*¹School of Government, College of Law, Government and International Studies,
Universiti Utara Malaysia, Sintok, Kedah, Malaysia*

*²School of Government, College of Law, Government and International Studies,
Universiti Utara Malaysia, Sintok, Kedah, Malaysia*

*³School of Government, College of Law, Government and International Studies,
Universiti Utara Malaysia, Sintok, Kedah, Malaysia*

ABSTRACT

The study of transformational leadership has received a lot of attention among academics in many fields of study including higher education. At the higher education level, transformational leadership can be cited as the key to success. This study aims to describe the perceptions of leaders and educational staff about transformational leadership at the universities where they work. Data were collected from the leader and educational staff of leading private universities in DKI Jakarta which are included in clusters 1-3 based on the results of the higher education clustering of the Ministry of Education and Culture. The data obtained from the questionnaire were analyzed using descriptive statistics. The results showed that leaders of leading private universities in DKI Jakarta have implemented transformational leadership which is characterized by charisma, high social abilities, vision for the future, transactional abilities when needed, good delegation of authority, and ability to become capable executors.

KEYWORDS: *transformational leadership, private universities, Jakarta*

1.0 INTRODUCTION

Higher education institutions around the world are currently facing a decline in public funding, while at the same time they are required to continue investing in order to remain relevant in an increasingly competitive market (Bendermacher, Egbrink, Wolfhagen & Dolmans, 2016). In line with that, higher education institutions in Indonesia are also faced with major transformation challenges that require extraordinary leadership, especially those related to various changes in government policies, communication and information technology, as well as the economic, social and cultural conditions of society. Sirat, Ahmad and Azman (2012) shared the same opinion and identified the need for higher

education leaders who are not only credible scholars but also progressive visionary and inspirational leaders.

This research on transformational leadership took the case of leading private universities in DKI Jakarta. The research objective was to describe the perceptions of leaders and educational staff about transformational leadership at the universities where they work. The research findings are useful for recommending ways of implementing effective transformational leadership, given that transformational leadership is very important in developing education in higher education.



2.0 LITERATURE REVIEW

Several researchers concluded that effective leadership has a positive impact on the effectiveness of higher education (Lim & Cromartie, 2001); process quality and student learning outcomes (Martin, Trigwell, Prosser and Ramsden, 2003); and service quality in higher education institutions which leads to increased competitiveness and long-term sustainability (Garwe, 2014).

Jovanovic and Cyric (2016) argue that "leadership in an educational context is the ability of vision, respectively, a leader must have a clear vision of the institutions including the futuristic dimension of actions, taking into account the achievement of the desired state in the long run that he/she would divide with all the members at the institutional level but that would also further reflect and create new programs of teaching and learning as well as politics, priorities, plans and procedures which daily life of the institution is consisted of". One type of leadership, namely transformational leadership, is very important in developing education in higher education. Rashed and Daud (2013) found that the quality of transformational leadership in higher education was significantly related to the collective organizational commitment of academic staff. Transformational leadership and participatory decision making also have a significant positive effect on lecturer job satisfaction (Zulfqar, Devos, Shahzad & Valke, 2015).

James MacGregor Burns (1978) was the first to introduce the concept of leadership transformation in his descriptive research of political leaders. According to Burns, transformation leadership is a process in which "leaders and followers help each other to advance to a higher level of morale and motivation". Burns distinguishes between transformation leadership and transactional leadership. According to Burns, the transformation approach creates significant changes in people's lives and organizations. A transformation approach redesigns perceptions and values, and changes employee expectations and aspirations.

In contrast to the transactional approach, the transformation approach is not based on a "give" and "take" relationship, but on the leader's personality, nature and ability to make change through example, articulation of an energizing vision and challenging goals. Transformation leaders are moral role models at work for the benefit of the team, organization and/or society. According to Burns, transformation leadership and transactional leadership are mutually exclusive. Transactional leaders usually do not try to change the culture in the organization but work within the existing culture whereas transformational leaders try to change the organizational culture.

Bass (1985) describes the psychological mechanisms for extending Burns' work. In this case,

Bass replaces transformation with the term "transformational". Bass describes how to measure transformational leadership, as well as how it affects followers' motivation and performance. The extent to which a leader's transformational nature can be measured in terms of its effect on followers. Followers feel trust, admiration, and loyalty and respect to leaders because leaders are willing to work harder than originally expected. This is because transformational leaders offer followers something more than just working for their own benefit; leaders give followers a mission and vision that inspires and gives them identity, transforming and motivating followers through idealized influence (charisma), intellectual stimulation and individual judgment. In addition, this leader encourages followers to find new and unique ways to challenge the status quo and change the environment to support success.

In contrast to Burns, Bass stated that leadership can simultaneously display transformational and transactional leadership. Bass (1985) suggests three ways that leaders can influence followers: "1) increasing awareness of the importance of tasks and values; 2) focuses on team and organizational goals rather than on goals alone; and 3. generating high-level needs". Bass (1985) further argues that transformational leadership consists of 4 elements: "1) individual consideration (the extent to which the leader pays attention to the needs of each follower, acts as a mentor or coach for followers and listens to the attention and needs of followers); 2) intellectual stimulation (the degree to which the leader challenges assumptions, takes risks and solicits followers for ideas); 3) inspirational motivation (the extent to which the leader articulates a vision that is attractive and inspiring to followers); and 4) idealized influence (providing role models for high ethical behavior, instilling pride, earning respect and trust)".

Yukl (2002) states that only people who have high ideals, moral values and high-level needs of followers can be called transformational leaders. Through idealized charisma or influence, the leader expresses his beliefs, takes a stand and attracts followers on an emotional level through a clear value system that is expressed in all actions as soon as he becomes a model for followers. Charisma is one of the main identifiers of transformational leaders. House (1976) identified the characteristics of charismatic leaders: "1) strong role models; 2) demonstrate competence; 3) articulate goals; 4) communicating high expectations; 5) expresses belief; and 6) evokes motives". Simola et al. (2012) define transformational leadership as "a type of leadership in which interactions among interested parties are organized around a collective purpose in such a way that transform, motivate and enhance the actions and ethical aspirations of followers."



3.0 METHOD

The approach used in this research is descriptive quantitative using a data collection instrument in the form of a questionnaire. The questionnaire was distributed to 200 leaders and educational staff who work at leading private universities that are in clusters 1-3 in the higher education cluster list published by the Ministry of

Education and Culture in 2020. Because the research is univariate, the data were analyzed using a frequency distribution to see the arrangement of the data in a table that has been classified according to certain categories by calculating raw data or percentages. The categories used as shown in Table 1.

Table 1: Mean Scores

Level of Agreement	Mean Score
Never	1.00 - 1.49
Rarely	1.50 - 2.49
Sometimes	2.50 - 3.49
Often	3.50 - 4.49
Always	4.50 - 5.00

Mean score used to determine the respondents' perceptions of the items studied regarding transformational leadership. After the questionnaire was compiled, the instrument was validated by three experts in the field of educational management. After making adjustments to the suggestions given by experts regarding the understanding of the item statement and its relevance and appropriateness in each factor, the questionnaire was tested on 30 random people who were not research respondents.

To determine reliability, Cronbach's Alpha model was used. The total reliability coefficient was

0.95 (Table 2) while for each factor ranged from 0.89 to 0.96 (Table 3). Therefore, it can be concluded that the questionnaire developed for this study has very high reliability, because the coefficient is close to 1, a value that reflects a high level of internal consistency.

The assumption of normality is tested through the Kolmogorov-Smirnova and Shapiro-Wilk examinations which show that normality is an acceptable assumption. Cronbach's Alpha was used to test the reliability of the scale. The total responses from 200 participants were used in the analysis.

Table 2: Reliability Test

Cronbach's Alpha	N
0.94	30

Reliability was found to be 95% for a scale of 30 items. So, the scale is very reliable.

Table 3: Factor Reliability

Factor	Cronbach's Alpha
Charisma	0.96
Social	0.89
Vision	0.95
Transactional	0.91
Delegation	0.98
Execution	0.95

4.0 RESULT AND DISCUSSION

The research results were described based on the data obtained from respondents through a questionnaire. The results and findings were described based on a number of statements grouped by the factors studied regarding transformational leadership. The results and discussion of transformational leadership were categorized as charismatic, social, vision, transactional, delegation,

and execution factors.

To analyze the perceptions of leaders and educational staff regarding transformational leadership, an examination of the average score and standard deviation obtained for each item from various factors formed the basis of the questionnaire. In general, the results can be seen in Table 4.

**Table 4: General Results for Transformational Leadership**

Dimensions	Mean	S.D
Charisma	4.32	0.152
Social	4.37	0.174
Vision	4.35	0.173
Transactional	4.63	0.168
Delegation	4.31	0.130
Execution	4.50	0.082

Next, Table 5 till Table 10 shown the statement that related to transformational leadership.

Table 5: Charisma

Statement	Mean	S.D
"Leaders do their best to make people feel good about them."	4.13	0.123
"Leaders have a growing network of people who trust and depend on them."	4.31	0.163
"Leaders listen to organizational ideas and concerns not because of fear, but because of their skills, knowledge, and personality."	4.52	0.169

Table 6: Social

Statement	Mean	S.D
"Leaders help people develop themselves."	4.61	0.153
"Leaders provide challenges for team members to help them grow."	4.32	0.178
"Leaders empathically sheds their shoulders when people need help."	4.19	0.191

Table 7: Vision

Statement	Mean	S.D
"Leaders help people understand their vision through the use of tools, such as pictures, stories, and models."	4.13	0.115
"Leaders use simple words, pictures and symbols to tell others what to do or can do together."	4.48	0.201
"Leaders help people in new ways to perceive new and complex ideas or concepts."	4.43	0.203

Table 8: Transactional

Statement	Mean	S.D
"Leaders ensure people get recognition and/or reward when they achieve difficult or complex goals."	4.53	0.221
"Leaders manage the team by setting mutually agreed standards"	4.64	0.179
"Leaders make sure poor performance is corrected."	4.71	0.103



Table 9: Delegation

Statement	Mean	S.D
“Leaders let people work the way they want”	3.91	0.232
“Leaders rarely provide direction or guidance to people if leaders feel they can achieve their goals.”	4.36	0.089
“As long as everything goes well leaders are satisfied.”	4.67	0.068

Table 10: Execution

Statement	Mean	S.D
“Leaders get things done.”	4.12	0.116
“Leaders consistently provide training and feedback so team members know what they are doing.”	4.59	0.092
“Leaders monitor everything for which they are responsible to ensure the team meets its objectives.”	4.78	0.038

The results of the study, referring to the findings summarized in Table 3-9, show that the type of leadership found in leading private universities in DKI Jakarta is transformational leadership. The transformational leadership shown makes the leaders admire and trust the team members, and this makes the team members agree with the various decisions taken by leaders. The leaders pay attention to the special needs of team members so that they know the weaknesses and strengths in the performance of each team member. This enables the leaders to make effective strategic decisions by considering the strengths of team members and overcoming their weaknesses. The leaders stimulate team members by listening to their ideas and suggestions so that they can get a variety of inputs from different points of view and perspective.

The leaders' behavior and actions clarify expectations for followers and encourage team spirit and commitment to achieving organizational goals and implementing strategic decisions. The leaders create a conducive organizational climate. The leaders' behavior that allows knowledge sharing also increases interpersonal trust which leads to a smoother exchange of information among team members, thereby increasing the effectiveness of strategic decisions. The leaders are able to manage conflict effectively so as to increase the effectiveness of strategic decisions through minimal levels of conflict and create cooperative behavior among team members. Lastly, the leaders are able to generate greater awareness and acceptance of the organization's mission and promote a shared vision among team members thereby increasing the effectiveness of strategic decisions.

Overall the study findings reinforce the results of previous studies (Lim & Cromartie, 2001; Martin, Trigwell, Prosser and Ramsden, 2003; Garwe, 2014) that transformational leadership is very important to improve the quality of education, performance, and long-term sustainability of higher education. These results have important implications for universities in two main ways: leader selection and leadership development. First, succession planning, recruitment, selection, and promotion decisions for leaders must be able to find individuals with potential who have the attributes of transformational leadership. Second, universities should invest more in building transformational leadership capabilities for leaders by providing them with adequate training programs in various aspects of transformational leadership.

5.0 CONCLUSION

The results showed that the leaders of the leading private universities in DKI Jakarta who were in the top ranks in terms of performance (clusters 1-3 based on the results of the higher education clustering of the Ministry of Education and Culture) had implemented transformational leadership. Leaders show charisma, have high social abilities, have a far-reaching vision, are able to be transactional when the situation requires, have good delegation skills, and are capable of being capable executors. Thus, the character of transformational leadership is very important for higher education institutions that want to improve their performance. This finding is in line with the results of previous research on leadership in higher education.

In order for private higher education institutions with good performance to maintain their



performance, succession planning, recruitment, selection, and promotion decisions must be oriented towards finding transformational leaders. Because leadership is a skill, which is something that can be learned, there needs to be a transformational leadership training program held in higher education institutions. This program can be carried out independently at each institution or as a future program for the Ministry of Education and Culture. The ministry's program can help leaders of other private higher education institutions whose performance has not been satisfactory to transform themselves into transformational leaders.

EducationalResearchAssociation.

REFERENCES

1. Bass, Bernard M. (1985). *Leadership and performance*. New York: Free Press.
2. Bendersmager, G. W. G., Egbrink, M. G. A., Wolfhagen, I. H. A. P. & Dolmans, D. H. J. M. (2016). *Unravelling Quality Culture in Higher Education: A Realist Review*. *High Education*, 73, 39–60.
3. Burns, J. M. (1978). *Leadership*. New York: Harper and Row.
4. Garwe, E. C. (2014). *The Effect of Institutional Leadership on Quality of Higher Education Provision*. *Research in Higher Education Journal*, 22.
5. House, R. J. (1976). *A 1976 theory of charismatic leadership*. Carbondale: Southern Illinois University Press.
6. Jovanovica, D. & Marina, C. (2016). *Benefits of transformational leadership in the context of education*. In *The European Proceedings of Social and Behavioral Sciences* EpSBS.
7. Lim, J. Y. & Cromartie, F. (2001). *Transformational leadership, organizational culture and organizational effectiveness in sport organizations*. *The Sport Journal*, 4(2), 111–169.
8. Martin, E., Trigwell, K., Prosser, M. & Ramsden, P. (2003). *Variation in the experience of leadership of teaching in higher education*. *Studies in Higher Education*, 23(3), 247–259.
9. Rashed, F. & Daud, K. (2013). *Effects of transformational leadership on organisational commitment at university department level*. In *2nd International Seminar on Quality and Affordable Education (ISQAE2013)*.
10. Simola, S., Barling, J., & Turner, N. (2012). *Transformational Leadership and Leaders' Mode of Care Reasoning*. *Journal of Business Ethics*, 108, 229–237.
11. Sirat, M., Ahmad, A. R. & Azman, N. (2012). *University leadership in crisis: The need for effective leadership positioning in Malaysia*. *Higher Education Policy*, 25, 511–529.
12. Yukl, G. (2002). *Leadership in organizations*. Cambridge, MA: Harvard Business Press.
13. Zulfqar, A., Devos, G., Shahzad, A. H., & Valcke, M. (2015). *Transformational leadership, participative decision making versus self-efficacy, intrinsic motivation and job satisfaction in Pakistan Higher Education*. *Annual meeting of the American*



A STUDY ON CUSTOMER PERCEPTION AND SATISFACTION TOWARDS JK TYRES IN COIMBATORE CITY

Hari Prasath G¹, Mr. Vimal Kumar P²

¹Student, Dr. N.G.P Arts And Science College, Coimbatore

²Assistant Professor (SG), Dr. N.G.P Arts and Science College, Coimbatore-048

ABSTRACT

JK Tyre & Industries Ltd is one of the leading automotive tyre manufacturers in India. The company mainly develops, manufactures, markets and distributes automotive tyres, tubes, flaps and retreads. It markets tyres for sale to vehicle manufacturers for fitment as original equipment and for sale in replacement markets. The company has manufacturing plants located in India and Mexico with worldwide distribution. The company has 134 sales, service and stock points located throughout the country. They have over 3,500 dealerships across India. The company's customer base covers virtually the entire Original Equipment Manufacturers in India together with Replacement Market for four wheeler vehicles, Defense and State Transport Units. Besides India, they have a worldwide customer base in over 45 countries across all six continents. JK Tyre & Industries Ltd was incorporated in the year February 14, 1951 as a private limited under the name JK Industries Pvt., Ltd. In this article we are going to see about JK Tyres

KEYWORDS: JK Tyre, India, Market

INTRODUCTION

A tire (American English) or tyre (British English; see spelling differences) is a ring-shaped component that surrounds a wheel's rim to transfer a vehicle's load from the axle through the wheel to the ground and to provide traction on the surface traveled over. Most tires, such as those for automobiles and bicycles, are pneumatically inflated structures, which also provide a flexible cushion that absorbs shock as the tire rolls over rough features on the surface. Tires provide a footprint that is designed to match the weight of the vehicle with the bearing strength of the surface that it rolls over by providing a bearing pressure that will not deform the surface excessively.

The materials of modern pneumatic tires are synthetic rubber, natural rubber, fabric and wire, along with carbon black and other chemical compounds.

They consist of a tread and a body. The tread provides traction while the body provides containment for a quantity of compressed air. Before rubber was developed, the first versions of tires were simply bands of metal fitted around wooden wheels to prevent wear and tear. Early rubber tires were solid (not pneumatic). Pneumatic tires are used on many types of vehicles, including cars, bicycles, motorcycles, buses, trucks, heavy equipment, and aircraft. Metal tires are still used on locomotives and railcars, and solid rubber (or other polymer) tires are still used in various non-automotive applications, such as some casters, carts, lawnmowers, and wheelbarrows.



SCOPE OF THE STUDY

- The study is purely based on the survey conducted in Coimbatore city and has focused on customers.
- The study conveys the information about the mind set which may vary from situation & where the respondents may not be able to give required and accurate information.

OBJECTIVES OF THE STUDY

- To study about the social status of customers.
- To know about the JK Tyres.
- To analyse the perception and satisfaction of customers
- To study the problems facing by customers.
- To offer suggestions based on the study.

LIMITATIONS OF THE STUDY

- Due to respondents' busy schedules, the interest shown by respondents to answer the questionnaire may be less. This may have resulted in collecting inaccurate information.
- Due to time and cost constraints, the sample size selected is 135.
- The selected sample size is small as compared to the total number of customers. Hence the obtained result may not be accurate as it may not represent the whole population.
- This analysis is only done on the customer point of view.
- The project is open for future improvement of the work.

REVIEW OF LITERATURE

Mahapatra, Kumar and Chauhan (2010)

A study on Customer satisfaction, dissatisfaction and post purchase evaluation: an empirical study on tyres in India roads with the main objectives to examine the satisfaction and impact on future purchase decision and explore the performance of different attributes in tyre manufacture companies in giving satisfaction to customer with the sample size of 100.

Kurkoti and Prabhu (2011)

—Study on satisfaction with reference to JK Tyres in Hyderabad with the objectives to determine the customer satisfaction towards JK Tyres, to study the gap analysis and to find out the impact tyre quality.

Sharma, Kiran Sharma and Khan (2010)

Conducted — A study and analysis of Customer satisfaction of JK Tyres in Thiruppur, with the objectives to find out the satisfaction among the customers, market performance and market position of JK Tyres they taken sample size of 100 customers in Thiruppur city and concluded from this study that 80% people feel that safety are affordable whereas 10% do not agree, 74% believe that the attractive discount are offered but 26% are not satisfied with discounts, but the overall opinion about JK Tyres is very good.

Tools For Analysis

The tools used for analysis are

- Simple percentage analysis.
- Chi-square test
- Simple average
- Weighted average
- Rank analysis

Frequency Table Simple percentage

MODE OF VEHICLE USING BY RESPONDENTS

S. No	Mode of vehicle	No. Of. Vehicles	Percentage
1	Two wheeler	81	60%
2	Three wheeler	0	0
3	Four wheeler	49	36.3%
4	Heavy vehicle	5	3.7%
Total		135	100%

From the above table out of 135 respondents 60% of them are using two wheeler, And no one is using three wheeler, 36.3% of them are using four wheeler, 3.7% of them are using heavy vehicles.

Majority 60% of the respondents are using two wheeler.



OCCUPATIONAL STATUS?

S. No	Occupational Status	No. Of Respondents	Percentage
1	Student	51	37.8%
2	Employee	49	36.3%
3	Business	29	21.5%
4	Professional	6	4.4%
Total		135	100%

From the above table out of 135 respondents 37.8% of them are students, 36.3% of them are employees,

21.5% of them are business, 4.4% of them are professionals.

Maximum 37.8% of the respondents are Students.

Simple Average

WHY DID YOU PREFER "JK TYRES"

S. No	Why did you prefer "JK TYRES"	No. Of Respondents	Simple average
1	Quality	99	0.73
2	Price	11	0.08
3	Service	4	0.02
4	Durability	21	0.15
Total		135	1

From the above table out of 135 respondents 0.73 of them are prefer quality, 0.08 of them are prefer price, 0.02 of them are prefer service, 0.15 of them are durability.

Majority 0.73 of the respondents are preferred quality.

Rank Analysis

ANALYSIS OF PROBLEM FACING WHILE PURCHASING "JK TYRES"

Factors	I	II	III	IV	V	Total	Rank
Lack of information	15 (75)	10 (40)	25 (75)	32 (64)	38 (38)	292	V
Non co-operation of showroom people	38 (190)	27 (108)	15 (45)	22 (44)	18 (18)	405	III
Delay	11 (55)	18 (72)	19 (57)	40 (80)	32 (32)	296	IV
Lack of service center	35 (175)	40 (160)	20 (60)	18 (36)	7 (7)	438	II
Costly service	52 (260)	30 (120)	12 (36)	14 (28)	12 (12)	456	I

It could be observed from the table that factors towards the —Costly service placed as **FIRST RANK** followed by —Lack of service center placed as **SECOND RANK**. —Non co-operation of showroom people and **THIRD RANK** Delay, **FOURTH RANK**. —Lack of information placed as **FIFTH RANK** respectively.



Weighted Average

RELATIONSHIP BETWEEN OCCUPATION AND OVERALL SATISFACTION LEVEL OF THE JK CUSTOMERS

It is observed from the above table that 0.37- of the respondents are student, 0.36- of the respondents are employee , 0.21 – of the respondents are business, 0.04 – of the respondents are professional.

OCCUPATION	OVERALL SATISFACTION LEVEL OF JK CUSTOMERS					TOTAL	MEAN SCORE
	HIGHLY SATISFIED (5)	SATISFIED (4)	NEUTRAL (3)	DIS SATISFIED (2)	HIGHLY DIS SATISFIED (1)		
Student	15	25	1	6	4	51	0.37
Employee	13	29	4	1	2	49	0.36
Business	6	19	2	0	2	29	0.21
Professional	3	2	1	0	0	6	0.04
TOTAL	37	75	8	7	8	135	1

RELATIONSHIP BETWEEN OCCUPATION AND OVERALL SATISFACTION LEVEL OF THE JK CUSTOMERS, THE HIGHEST MEAN SCORE IS 0.37 – THE RESPONDENTS ARE STUDENT

CHI – SQUARE ANALYSIS

RELATIONSHIP BETWEEN AGE AND OVERALL SATISFACTION LEVEL OF THE JK CUSTOMERS

TABLE 4.17

Hypothesis

There is no relationship between age of the respondents and overall satisfaction towards JK customers.

AGE	OVERALL SATISFACTION LEVEL OF JK CUSTOMERS					TOTAL
	HIGHLY SATISFIED	SATISFIED	NEUTRAL	DIS SATISFIED	HIGHLY DIS SATISFIED	
Below 20years	1	5	0	1	1	8
21 to 30YEARS	18	24	2	5	2	51
31 to 40YEARS	5	15	3	1	3	27
Above 40years	13	31	3	0	2	49
TOTAL	37	75	8	7	8	135

To find out the association between age and satisfaction level of the respondents Calculated value of chi-square = 13.9

Degree of freedom r = Row – Column
 $= (4-1) (5-1) = 3*4 = 12$

Table Value = 5.226

CHI – SQUARE RESULT TEST ANALYSIS

Calculated Value	Degree of freedom	Table Value	Result
13.9	12	5.226	Significant

The calculated value of chi-square at 5%level of significance is higher then the table value hence the hypothesis is rejected. Hence there is a relationship between age and satisfaction of JK Tyres used by



respondents.

FINDINGS, SUGGESTIONS AND CONCLUSION

Finding of the Study

Simple Percentage Analysis

- Majority 37.8% of the respondents are in the age group of 20 – 30 years.
- Majority 69.6% of the respondents are male.
- Maximum 37.8% of the respondents are Students
- Majority 83.7% of the respondents educational qualification is graduate.
- Majority 58.5% of the respondents are middle class people.
- Majority 60% of the respondents are using two wheeler.
- Majority 37% of the respondents are selected the option 2 members.
- Majority 52.2% of the respondents are 1 person.
- Majority 71.1% of the respondents are selected self –decision.
- Majority 73.3% of the respondents are preferred quality.
- Majority 73.1% of the respondents are using tubeless tyres.
- Majority 88% of the respondents are prefer to use tubeless tyres.
- Majority 51.9% of the respondents are selected 2 to 4 years
- Majority 85.2% of the respondents are purchasing middle range tyres.
- Majority 62.7% of the respondents are satisfied
- Majority 75% of the respondents are selected Costly service.

CHI-SQUARE ANALYSIS

- There is a relationship between age and satisfaction of JK Tyres used by respondents.
- There is no relationship between age and satisfaction of JK Tyres used by respondents.
- There is a relationship between age and satisfaction of JK Tyres used by respondents.
- There is a relationship between age and satisfaction of JK Tyres used by respondents.

SUGGESTIONS

- ✓ The price of the JK Tyre can be reduced to attract customers.
- ✓ Improvement in design can also attract customer.
- ✓ Online advertisement can be given to attract new customers.
- ✓ Different offers can be made to increase the sale.
- ✓ Improving the quality is helps to retain the old customer and also attract the new customer.
- ✓ Sponsoring in many events is helps to attract new customers.

CONCLUSION

According to the study I conclude that the JK TYRES company satisfies the customer need and the purpose , but only problem is with price of the tyres. So, as per study in my opinion based on project, I can say that JK TYRES should think about price of the tyres provided by them in order to capture the maximum market segment.

According to Coimbatore city the market is vast almost the whole district customers and other new people purchase the JK Tyres because it is old brand running tyre in market .

Almost people demands the JK Tyres comparing to other company tyres.

Company should provide more advertisement and always keep satisfying customers need with development of JK Tyres.



BASICS OF ARTIFICIAL NEURAL NETWORKS FUTURE SCOPES AND APPLICATIONS

Atharv Rathore¹, Anidhya Gangrade², Chinmay Pacharne³
Acropolis Institute of Technology and Research

ABSTRACT

Artificial neural network is a computer program inspired from the human brain that acts just like the human brain processes information. ANN's gather data or information similarly to that the brain does, that is by detecting patterns and learning through experience not by programming. An ANN is configured for specific purposes, such as pattern recognition or data classification, through a learning process. with the knowledge of the biological system involves adjustments to the synaptic connections that are present between neurons. This holds true for ANN as well. This paper gives an overview of the Artificial Neural Network and it also explains it's application and advantages.

INTRODUCTION

The study of the human brain has been an ongoing field of study for thousands of years. With the coming of the age of technology it was only natural that we try and harness this thinking process. In 1843 Warren McCulloch a neurophysiologist and Warren Pitts a young mathematician wrote a paper on how the neurons might work. They modelled the neural network with electrical circuits. Neural Networks have the ability to derive meaning from complicated and imprecise data at times that can be used to find meaning in data that human brain or other computer techniques fail to notice. This could be detecting trends, extracting data, observing trends. A trained neural network can be considered as an "expert" in the category of information it has been given to process. Other advantages of a neural network are :

1. Adaptive Learning – An ability to learn how to complete tasks based on the initial experience or training.
2. Self-Organization – An ANN can make it's own representation of the data it gets during the learning state.
3. Real Time Operation – ANN operations can be carried out in parallel and special hardware

devices are being designed and manufactured which take advantage of this capability.

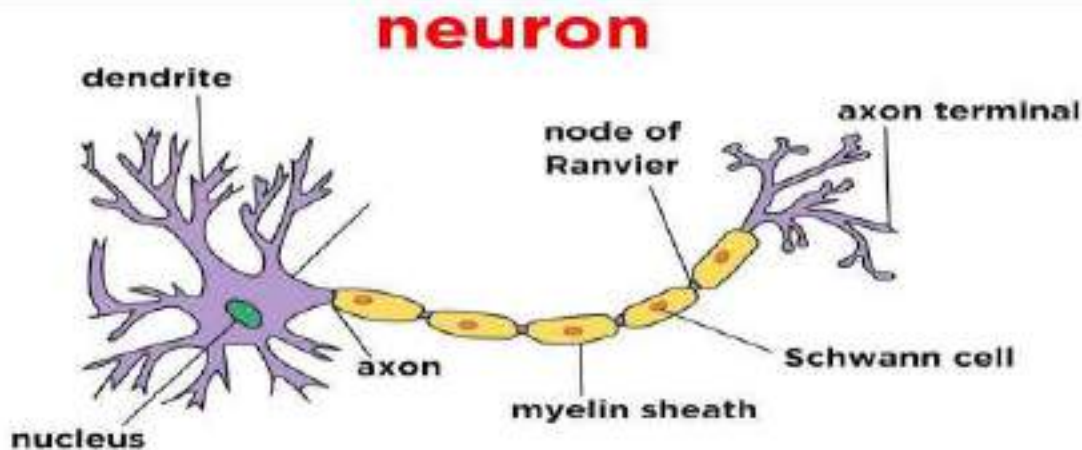
4. Fault Tolerance – Partial destruction of a network leads to degradation of performance. But just like with the human brain, some capabilities may still be retained even with major network damage.

The problem solving approach of an ANN is different from that of conventional computers. Conventional computers use an algorithmic approach that means that the computer follows a given set of instruction that it follows in order to solve a problem. Unless the program knows what steps to follow to solve the problem it won't be able to. This in turn restricts the capabilities of a conventional computer to problems that we already know how to solve. But what if computers could solve problems, we don't know how to solve? That is exactly what a neural network does. They process information in a similar way to the brain. The network is consisting of highly interconnected processing elements (similar to neurons in a brain) that are working in parallel to solve a problem To do specific tasks neural networks cannot be programmed to do specific tasks rather neural networks learn by example, these examples need to be selected very carefully otherwise time might be wasted or in a worse



situation the network might not function correctly. The disadvantage is because the network finds how to solve the problem by itself, the operation can then be very unpredictable. Whereas, conventional computers use a cognitive approach, to solve a given problem; the steps to solve the problem must be known and stated in small unambiguous instructions. Neural networks and conventional computers are not in competition with

each other rather they complement each other. Some tasks are more suited for conventional algorithmic computers like arithmetic operations and tasks that are better suited for the neural networks. Also a large number of tasks that are more suited to a combination of the two approaches in order to perform maximum efficiency.



What is an Artificial Neural Network?

Neural Networks are a set of algorithms that are inspired by how the human brain functions. When you open your eyes what you see and what you feel is processed by the neurons in your brain, that then recognises what is around you. That's how similar the Neural Networks work. They take a big set of data, process the data and output what it is.

Neural Networks are sometimes called as ANN's (Artificial Neural Network) because unlike neurons in our brain they are artificial. They mimic nature and also the functioning of a neural network. ANN's consist of a big number of elements that are highly interconnected that are working in unison to solve problems.

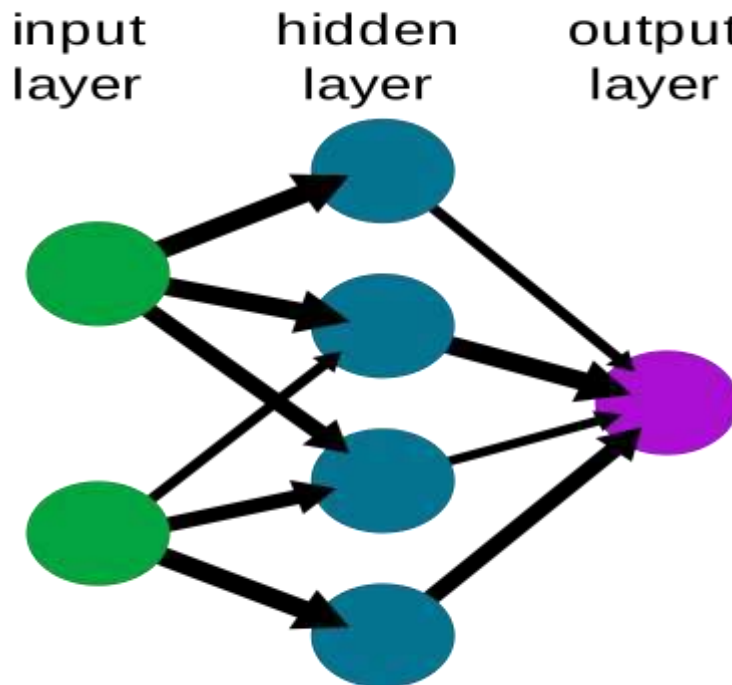
The advancements in biological research promises an understanding of how the natural thinking mechanism works. Research explains that the brain processes information as patterns. some of these

patterns are complicated and allow us the ability to recognise faces, understand facial expressions, deduce emotions and so much more. Using ANN's and the knowledge of the working of a human brain we can design machines that can work just like a human brain does and work on complex problems that are difficult for the human brain to solve.

Traditionally the neural network used to be referred as network or circuit of a biological neuron, but the modern term refers to mostly as ANN. ANN is a mathematical model that is inspired by how the biological nervous system, such as brain information system. ANN is made up of interconnected artificial neurons that are programmed to work just like neurons in our brain so that they process the problems in unison just like a brain. An ANN is used in speech recognition, image analysis, adaptive control etc. These applications are done through a process that is similar to how a human brain learns things.



A simple neural network

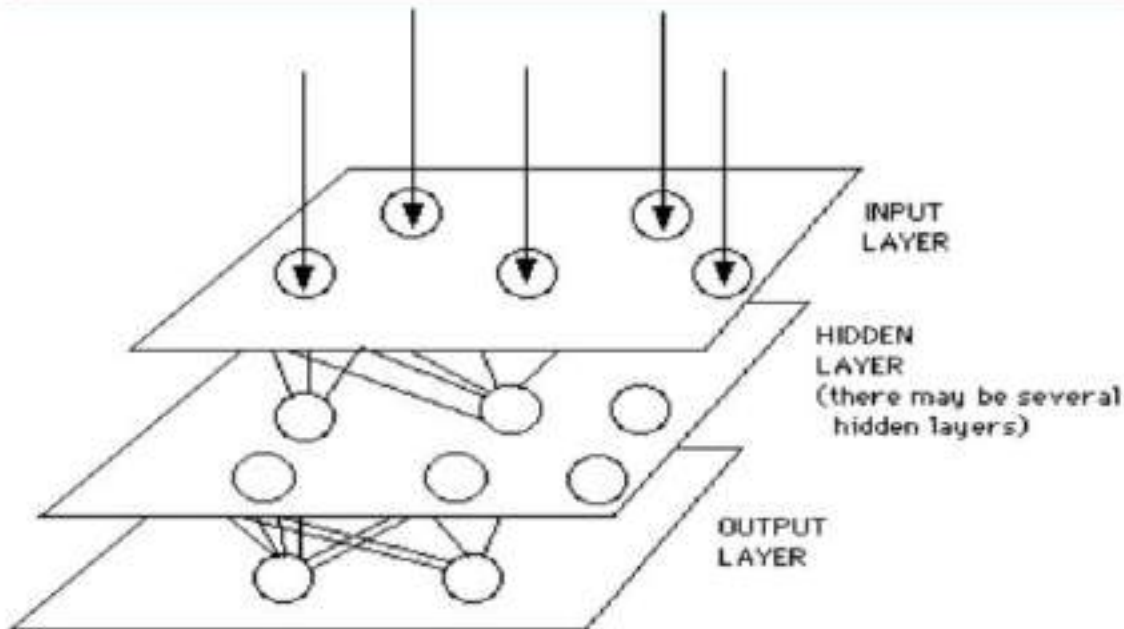


Working of ANN

The use of neural networks revolves around the ways in which these individual neurons can be clustered together. This clustering also occurs in the human mind, which in turn processes information and then it can be processed in an interactive, dynamic and self organized way. Biologically the neurons are capable of nearly endless interconnections. The neural network is a three dimensional network made up of microscopic components This is not true and not

possible for any man made network. The current technology using integrated circuits are two dimensional with a limited number of layers for interconnections. This in turn restricts the type and scope of artificial neural networks that can be implemented in silicon.

Currently neural networks are just simple clusters of primitive artificial neurons. This clustering is achieved by creating layers which are then connected to each other.



All artificial neural networks have a similar structure or topology as shown in the Figure. In this structure the neurons interact with the real world to get inputs. While other neurons provide the real world with the outputs processed by the network. The output is the particular character that the network has scanned or the image it thinks is being viewed. The rest of the Neurons are hidden from the view. A neural network is a little more than just a bunch of neurons. Early researchers tried to connect neurons in a random order which did not work and had no success. Now it is known that even a snail has a brain that is structured. The easiest way to design a structure is to create layers of elements. Grouping of these neurons into layers, connection between these layers, the summation and transfer function that comprises a functional neural network.

Although there are networks that consist of just one layer or sometimes even one element, most applications require at least three normal types of layers. These are input, hidden and output. The neurons in the input layer receive data from the input files in real-time application. The output layer sends the information directly to the outside world to other devices such as a control system. Between these layers lies many hidden layers, this is because we can't see their output even if they're part of the model, these internal layers contain many types of neurons in

interconnected structures. The input and output of these hidden neurons simply go to other neurons.

In most of the neurons there is a hidden neuron which usually receives inputs from the input layer. Once the neuron completes its function it passes the output to all the neurons in the layer below itself providing a feedforward path to the output.

These lines of communication from neuron to another is an important aspect of neural networks. They hold the system together. These connections provide variable strength to an input. There are two types of these connections. One causes the summing mechanism of the next neuron to add while the other causes it to subtract. To put it into human terms one will excite while the other inhibits.

In some networks there's a need for a neuron to inhibit the other neuron in the same layer. This is called lateral inhibition. This is mostly commonly found in the output layer. For example in text recognition if the probability of a character being a "P" is .95 and the probability of the character being an "F" is .85, the network wants to choose the highest probability and inhibit all the others. This concept is known as competition.

Another type of connection is feedback. This is where the output of one layer is routed back to the previous layer.

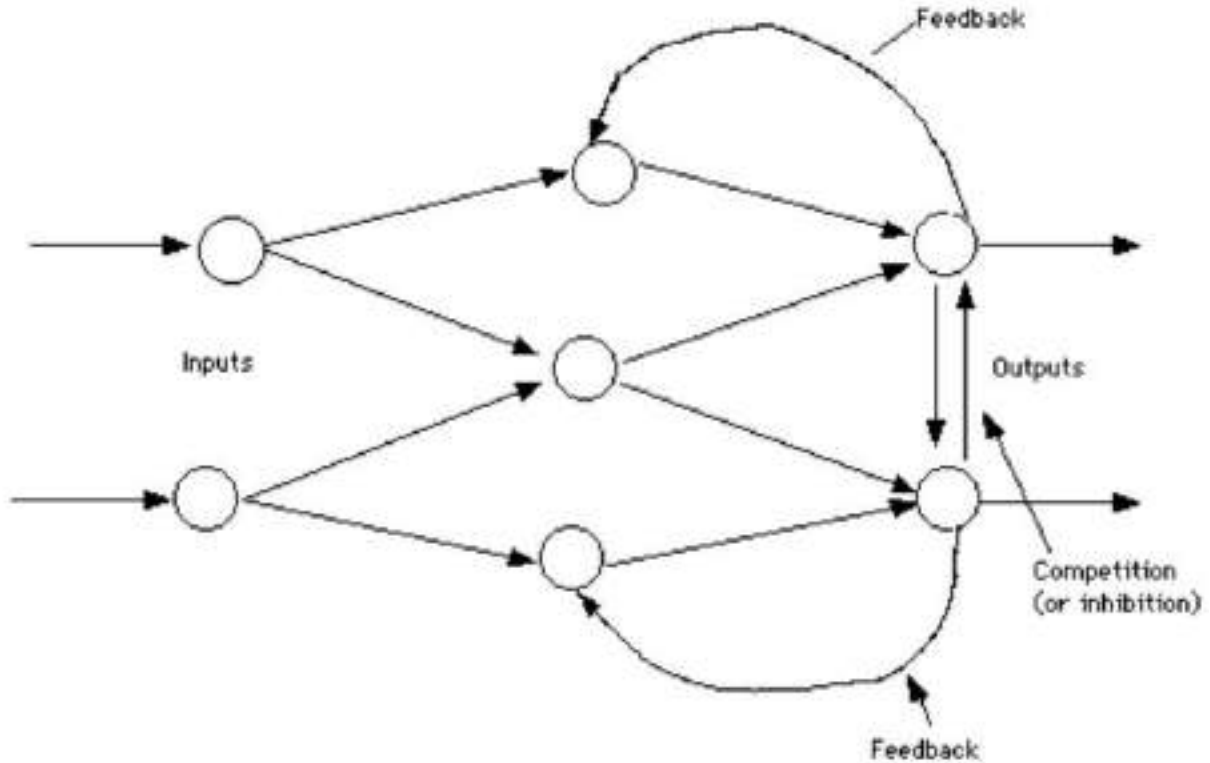


Figure 2:- Simple Network with Feedback and Competition.

The way that the neurons are connected to each other impact significantly on the operation of the network. In a large , more professional software development package the user is allowed to add, delete, and control these connections at will. By tweaking parameters these connections can be made to either be excited or inhibited.

TRAINING AN ARTIFICIAL NEURAL NETWORK

After a network has been structured for a particular application, that network can then be trained. To start this process the initial weight are taken at random. Then, the training or learning can begin. There are two approaches to training a network - Supervised and Unsupervised, Supervised training is where It is defined by its use of labeled datasets to train algorithms to classify data or predict outcomes accurately. As

input data is fed into the model, it adjusts its weights through a reinforcement learning process, which ensures that the model has been fitted appropriately. Unsupervised training on the other hand is where the network has to make sense of the given inputs/ data by itself without any outside help. Vastly most networks use supervised learning whereas unsupervised learning is used to perform some initial characterization on the inputs. However, in the full blown sense of being truly self learning, it is still just a shining promise that is not fully understood.

1. Supervised Learning

In supervised learning the network is given both, the inputs and the outputs. The network processes the inputs and then



compares the results with the desired outputs, Errors then propagate back to the system and weights are adjusted which in turn control the system. This process occurs over and over again this is because weights are continually tweaked. The set of data which enables training a network is known as “training set”. During the training of a network the same set of data is processed multiple times over and over again so as to refine the connections weights. The current commercial tools provide tools that are helpful in monitoring how close the network is to predicting or calculating the correct answer. These tools allow the training processes to go on for days stopping only, if and when the system reaches the desired statistical point, or accuracy. However, some networks never learn, this can happen because of multiple reasons, input data may not contain specific information needed for the desired output, Networks may not converge if there is not enough data that can enable complete learning. In an ideal condition there’s enough data so that to enable complete learning. There should be enough data that a part of it can be held back as a test after the learning process of the system completes. Networks with multiple layers are capable of memorizing data. To monitor the network to determine whether the system is simply memorizing its data in some non significant way, therefore supervised training needs to hold back a set of data so that the system can be tested after it has undergone its training.

If a network simply can’t solve the problem, then a review of the inputs and outputs must be conducted, the number of layers, connection between the layers, the summation, transfers, and training functions and also even the initial weights themselves. There’s a lot of rules that are used in implementing the adaptive feedback required to adjust weights during training. The most common of these is known as back-propagation. The various learning techniques are explored in greater depth later in this report.

Training is not just a technique it involves conscious analysis so as to ensure that the network is not over trained. Initially, an

artificial neural network configures itself according to the general statistical trend of the given data. Later on it continues to “learn” about other aspects of the given data which may not be correct from a general viewpoint. When the learning phase is completed and no further learning is needed, the weights can be frozen if desired. Some systems are then turned into hardware so that it can be quick.

2. Unsupervised Learning or Adaptive Learning.

In unsupervised training the network is provided with inputs but not the outputs for the given inputs. The system must decide itself what features it will use to group the input data. This is also known as adaptation or self-organization. Currently, unsupervised learning is not very well understood. This adaptation would enable robots and machines to learn on their own as they encounter new situations and environments. Human life is filled with situations where training sets are impossible to exist. Be it mountain climbing, wars there's so many situations where a complete new environment and unknown situations one might face, therefore there continues to be research into and hope for this field.

Real World Applications of ANN

There are endless possibilities with the Artificial Neural Networks some of them are :

1. Speech Recognition holds a very prominent role in interaction between humans and although limited we’re progressing towards a future where communicating with a machine will be very lifelike,
2. Character Recognition is very much possible with a trained ANN.
3. Classification, which includes pattern and sequence recognition, sequential decision making.
4. Human Face Recognition biometric ability of a machine to identify a face with a well trained neural network is very much possible.
5. Self Driving Vehicles may seem like a far off future but it is possible and is being implemented in electric cars throughout the world and is a forefront for the future,



Challenges of Neural Network

Some of the challenges we face with Neural Networks are :

1. **Training** - With the neural networks, particularly in robotics applications, excessive training is necessary for real world operations. We can overcome this by randomly shuffling training examples. Using a numerical optimization algorithm, small steps in place of large steps. Another way can be by grouping examples in mini-batches. This in turn improves efficiencies and convergence capabilities is an ongoing research area.
2. **Theoretical issues** - Problems remain to be unsolved, even with the most sophisticated neural network.
3. **Inauthenticity** - The theoretical challenges we address above arise because neural networks don't function exactly like a human brain does they operate like a brain. The specifics of how a brain completely functions is still unknown. ANN's don't replicate the human brain but merely use them as an inspiration. Statistical association is possible because of this, which is the basis of artificial neural networks.
4. **Hardware Issues** - The focus on neural networks is due to the huge increase in computation power since 1991, which in turn has enabled the increase in greater multi-layering and deep learning and use of multiple parallel GPU's (Graphical Processing Unit) has reduced the time required significantly. Despite this, the hardware needed specifically for AI is being innovated and designed but there's a lot of time before we reach there.
5. **Hybrids** - To overcome some of the challenges of neural networks, there's a proposal to combine neural networks with symbolic AI. Humans possess an unequivocal form that uses symbols and rules. So far, the difficulties of developing symbolic AI have been unresolvable — but that status may soon change.

The Future of Neural Networks

Some likely developments in neural network technologies are :

1. **Fuzzy Logic Integration** - This recognizes that are more than just true or false values - it takes into account concepts that are relative, like somewhat, sometimes and usually. Fuzzy logic will be an essential feature in future neural network applications.

2. **Pulsed Neural Network** - Recent neurobiological experiment data has clarified that brains communicate and connect through pulsing and use the timing of pulses to transmit information and perform computations. This has accelerated research including theoretical analysis, model development, neurobiological modelling and hardware deployment, This all is to make computing come closer to the way our brains function.
3. **Specialized Hardware** - There's a development explosion to create hardware that will increase the speed of computation and also lower the cost of neural networks in turn. Established companies and startups are racing to develop improved chips and graphic processing units, but the real news is the fast development of neural network processing units (NNPUs) and other hardware which is specific to AI is collectively referred to as *neurosynaptic architectures*.
4. **Improvement in existing technologies** - New software and hardware along with the current neural network technologies and the increased computing power of neurosynaptic architectures, is just a start of what neural networks can do and the endless possibilities that lie ahead of us.
5. **Robotics** - There's countless predictions that say we'll have robots that will be like us, feel like us, talk like us. However, futurist Yonck says that we still have a very long way to go before robots replace us.

CONCLUSION

In this paper we have discussed the basics and working of an ANN. Also training phases of an ANN. Depending upon the nature of the application and the strength of internal data patterns a ANN has a big advantage over conventional networks. Over the conventional techniques ANN provides an analytical alternative. Conventional systems on the other hand are limited by assumptions of normality, linearity and variable independence. This allows users with the power of ANN to quickly and easily model phenomena that are relatively difficult or impossible to explain otherwise. Neural Networks are progressing at a very fast pace, it holds the key to our future, with the development of better hardware and new knowledge of the brain we can truly progress towards



an automated future where everything that could be controlled without us having to do anything.

REFERENCES

1. Bradshaw, J.A., Carden, K.J., Riordan, D., 1991. *Ecological —Applications Using a Novel Expert System Shell*. *Comp. Appl. Biosci.* 7, 79–83.
2. N. Murata, S. Yoshizawa, and S. Amari, —*Learning curves, model selection and complexity of neural networks*,^l in *Advances in Neural Information Processing Systems 5*, S. Jose Hanson, J. D. Cowan, and C. Lee Giles, ed. San Mateo, CA: Morgan Kaufmann, 1993, pp. 607-61
3. Aggarwal, Charu C. *Neural Networks and Deep Learning: A Textbook*. New York City: Springer International Publishing, 2018.
4. Hassoun, Mohamad. *Fundamentals of Artificial Neural Networks*. Cambridge: The MIT Press | A Bradford Book, 2013.
5. Heaton, Jeff. *Introduction to the Math of Neural Networks*. Heaton Research, Inc., 2012.



E-VOTING SYSTEMS USING BLOCKCHAIN: A SYSTEMATIC REVIEW AND FUTURE RESEARCH DIRECTION

**Dhiraj Amrutkar*,Gaurav Dongare*,Sayog Sonune*,
Archana Y. Chaudhari****

**UG Students, Department of Computer Engineering, Dr. D. Y. Patil Institute of Technology,
Savitribai Phule Pune University, Pune, India.*

***Assistant Professor, Department of Computer Engineering, Dr. D. Y. Patil Institute of Technology,
Savitribai Phule Pune University, Pune, India.*

Article DOI: <https://doi.org/10.36713/epra7157>

DOI No: 10.36713/epra7157

ABSTRACT

One of the most important discoveries and creative developments that is playing a vital role in the professional world today is blockchain technology. A blockchain is a distributed, digitized and consensus-based secure information storage mechanism. Blockchain technology moves in the direction of persistent revolution and change. In the last couple of years, the upsurge in blockchain technology has obliged scholars and specialists to scrutinize new ways to apply blockchain technology with a wide range of domains. The dramatic increase in blockchain technology has provided many new application opportunities, including e-voting application. The present article provides a systematic review of emerging blockchain-based e-voting systems. In this paper, we call attention to the open research matters in this fast-growing field, explaining them in some details. It was concluded that frameworks needed enhancements in order to be used in voting systems due to these reservations.

KEYWORDS: *blockchain, e-voting, cloud computing, ethereum; ballot*

I. INTRODUCTION

Today's democracies are built on consensus among the population through voting. Currently, a lot of countries use the traditional ballot system, which requires centralized control with a trusted party for conduction of the voting process, and recording and counting of the vote ballots by the trusted third party. However, this introduces the possibility of corruption and manipulation of votes. As an improved alternative to the ballot system, an electronic voting, or e-voting,

system has been proposed and implemented in limited scenarios, due to its promising capabilities of reducing costs and decreasing manual intervention. However, e-voting systems have not been implemented on a large-scale due to concerns regarding security, transparency, distributed authority, data integrity, privacy and compliance requirements.

An election, which takes place in the form of voting, is a process that involves members in mutual



competition. This forces us to develop a system which is very secure and is not vulnerable to attacks by the people participating in the elections, the voters or the third party which conducts the elections. Such a process cannot be secured by cryptographic process alone. If the secret key used in the cryptographic process is found out or manipulated by the party conducting the elections, the entire system fails and is not secure. In such an environment, it is necessary to adhere to policies like the distributed ledger. Blockchain being a technology which uses distributed ledgers, can be ideally used for this process. The blockchain network can be either a permission-less network like Bitcoin or Ethereum where anyone is allowed to interact with the network, or a permissioned network like Hyperledger Fabric, Hyperledger Sawtooth or Exonum where only known members are allowed to interact with the network. Another important issue to be addressed is the anonymity of the voter. Due to the increase in research and progress in the field of big data analytics, this data is susceptible to discovery and manipulation. This can be resolved by using techniques like one-time ring signatures and homomorphic encryption.

The ideology of designing and implementing an e-voting system using blockchain overcomes the majority of drawbacks of standard e-voting systems and offers encouraging research initiatives. The fundamental decentralized nature of blockchain conceptualizes the technology as a secure third party. Consequently, an e-voting system implemented using the blockchain technology can be trusted to add only valid and verified voting blocks to the blockchain network. In addition, any attempt to tamper with the blocks in the blockchain is viewed as a violation of the blockchain network's consensus principles and is prohibited by the blockchain network [4]. Therefore, an e-voting system based on blockchain is convenient, automated, transparent, secure and free from corruption.

II. LITERATURE SURVEY

A. The Blockchain Technology

Blockchain is so-called, as it consists of a chain of blocks, that is, interconnected nodes that have their copy of the distributed ledger that contains the history of all transactions. Data is processed and put in a block through a process called mining. Every block contains a hash of the previous block and hence it forms a chain of blocks, with the first block known as the genesis block. Hence, it forms a linked list kind of structure. Blockchain has a number of ledgers where data can only be appended but not deleted or

tampered. Consequently, it is immutable. Blockchain can either be public, where anyone can read or write data onto the blockchain, or private (permissioned), in which case only a few restricted individuals can read or write data.

B. Existing E-Voting Systems and Betterment using Blockchain

Estonia has been using electronic voting (I-voting system) since 2005. The basis of this system is a national ID card given to all its citizens. These cards are encrypted files, which uniquely identify the owner and can be used for signing documents, banking services, and so on. For the voter to cast his/her vote, the voter must insert their card into a card reader, after which the voter will be granted access to the voting website. Moreover, the eligibility of the voter is verified after the voter enters their when prompted on the website interface. Once authenticated, the voter has time until four days before election day, within which the voter can cast his/her vote, and also modify the casted vote. Once the vote has been submitted, the vote is passed through the publicly accessible vote forwarding server to the vote storage server, where it is encrypted and stored until the online voting period is over. From the vote storage server, the vote information is transferred to an isolated vote counting server through DVDs. This server decrypts and counts the votes, and produces the election results. However, there is a possibility of malicious attacks that compromise the client-side machine by changing the voter's votes, without the voters' knowledge. Moreover, another possible risk is that of an attacker directly infecting the servers through malware being placed on the DVDs used for the transfer of votes. Consequently, such an electronic-voting system introduces concerns of security due to the presence of a vulnerable centralized authority and database server to store and manage the votes.

Translating this process to the blockchain network to improve reliability and resolve concerns of manipulation from the client system, a system can be proposed consisting of two blockchains- the vote blockchain and voter blockchain. This involves a registration process of voters followed by the voting process. In the registration process, the voter fills a form with all his/her personal details. This is a transaction and is added to the voter blockchain. In this process, the miner analyses the transaction and awards the user with a vote token, obtained from a pool of infinite vote tokens. Following this, a ballot paper and a password are sent to the voter, using which the voter can cast his/her vote. The user is now authenticated with the following three pieces of evidence: identification number, the password



generated during registration and the ballot paper. As a result, following the authorization step of verifying the user's right to vote, another transaction is created in the same voter blockchain, which is the transaction containing the user's vote token, indicating the availability of the user's vote. Once the user votes, this transaction containing the user's vote is removed from the voter blockchain.

In order to simplify and scale the design, the system can be designed to have a 3-tier architecture: National, Constituency and Local. The local tier consists of all polling stations and is associated with a constituency node. The constituency tier contains all nodes in the constituency level. The national nodes are responsible for mining transactions and adding blocks to the vote blockchain. As part of the design, there exists an encryption method based on public and private keys and a structure where the data is segregated and isolated logically. This segregation has been achieved by getting the different constituency level nodes to generate distinct key pairs. The public key of a constituency node will then be distributed to the polling station nodes connected to that particular constituency node, which use the public key to encrypt any vote made at those polling stations. The vote and voter data from all constituency nodes are then stored in an encrypted format within the blockchain and are propagated out to the entire network. Therefore, even if a hacker manages to get hold of a constituency private key, he/she would only be able to decrypt a part of the blockchain, that is, the votes originating from that particular constituency node. Consequently, this design makes the system more independent and secure. However, this system is not effectively manageable for large-scale implementation due to large overhead in encrypting all the votes.

C. Requirements

The existing e-voting systems proposed for implementation using the blockchain technology can be summarized to constitute of the following requirements and features

- Public Verifiability: All stakeholders of the election process (including people spectating voting process) can verify the election's whole procedure and result.
- Individual Verifiability: Each voter can verify

that his/her vote has been accurately recorded and considered.

- Dependability and Reliability: Asymmetric-key cryptography and various blockchain mechanisms to protect against attacks. Digital signatures (blind signature or short-linkable ring signature) are used to validate votes to allow adding of only valid and verified votes to the blockchain network.
- Consistency: Through consensus mechanisms of blockchain, all nodes have the same copy of records (same copy of blockchain) at a particular point of time, and all of them will contain the same final result after the election process is complete.
- Auditability: The whole procedure is auditable after the election, if necessary.
- Anonymity: No connection between voters and votes. Complete privacy of voters is ensured through cryptography and the use of zero-knowledge proofing to validate votes.
- Transparency: The whole process is open to the public. It is secure while being transparent.
- Scalability: Short-linkable ring signature is used for the digital signature mechanism, which has the ability to support a large number of voters.
- Eligibility: Making sure that only eligible candidates have access to the system.
- Authentication: Authenticating users wishing to access the e-voting system, using a unique voter ID issued to them, along with other credentials.
- Fairness: The election results are not live. Due to the absence of a centralized authority, counting of votes can only be performed after the entire election process is complete, by decrypting the encrypted blocks in the blockchain network.

D. Blockchain Methodology for E-Voting System

Any blockchain-based e-voting system will consist of the following entities :

- Smart Contract Admin
- Voting Process Admin/ Authorization Organization
- Smart Contract
- Voters

The architecture can be summarized as follows:

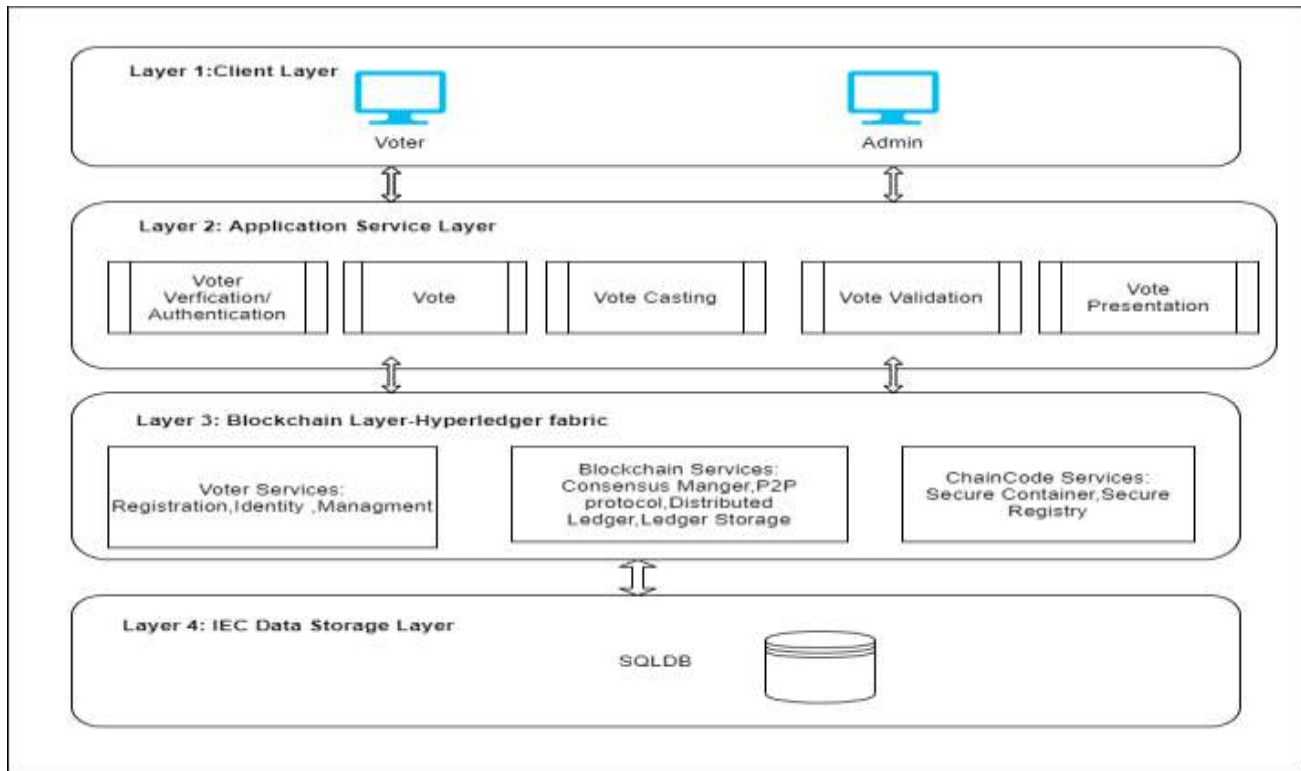


Fig. 1. Simple Architecture of a Blockchain e-voting system [9]

The working of a simple blockchain-based e-voting system can be explained as follows: The very first transaction added to the block is a special transaction which represents the candidate. It has the details of the candidate and acts as a foundation on which the votes can be added to that candidate. However, creating one chain for each candidate introduces a larger overhead for storage and processing, making it more complex.

Alternatively, crypto-voting has been explored for implementation using the sidechain technology, in which two sidechains are linked to a parent blockchain. Moreover, one sidechain stores the voter and vote information, while the other sidechain stores the count of votes, or the results. However, this makes the election results live during the election process, and impedes the principle of fairness of a democratic election.

An alternate design for the e-voting system can consist of a district node and a boot node where the district node manages the smart contract of the boot node. The district nodes collectively agree upon whether a vote is valid or not, which makes the system decentralized.

The following frameworks can be used for smart contracts: Exonium which uses Rust language,

Quorum which is based on Ethereum framework and Geth which is a short form for Go-Ethereum.

Ethereum is a platform where decentralized applications can be built either on a public or private network. Ethers are needed to use the public Ethereum platform. It uses a smart contract to validate and store votes. However, the Ethereum framework is a heavy-weight framework.

The Multichain framework can be used to create private blockchain networks. It requires less computation power and is free for usage, unlike the Ethereum network. The primary feature of an e-voting system is anonymity- no one should know whom the voter voted for. For this purpose, TTP (Trusted Third Party) can be used. The other component required is an authentication organization, similar to the election commission. Due to the support of both of these features in multichain, it can be used as the blockchain network. Each vote is treated as an asset in the multichain. Before voting, the voter should have an intention to vote. The voters register following which the authorization organization assigns an identification number to each voter, to be used in the voting process, creates a public address in the multichain network and stores it against the voter. During



the voting process, the voter has to submit the identification number and his/her secret message (vote). The Trusted Third Party (TTP) is used to verify the vote. The TTP generates a public key for the voter using the network and uses this to store the information against the hash of the secret message and the identification number of the voter. Multichain also restricts the voter to vote only once. During the e-voting process, voters access the system through an interface using their voter ID and credentials, and view the list of candidates. When the logged-in voter votes for a candidate, the voter's information and the vote cast is verified by TTP and securely added to the blockchain network.

analyzing the trends in various fields, which includes webometrics, bibliometric, scientometric, and H-index [18]. Among this, bibliometric analysis is common in most research works as it is a combination of qualitative and quantitative research works. This study uses publication types, subject areas, secondary data research, yearly publication trends, geographical publications, and citations method for analyzing the researches. For the bibliometric analysis, the author used the Web of Science(WoS) [19] database to construct the literature. Several networks have been built regarding keywords and title of the researches on e-voting system and blockchain, citations, and authors.

III. BIBLIOMETRIC ANALYSIS

It is mandatory for the researchers to have in-depth knowledge about the ongoing researches in their respective field and the authors who contribute to such research. This information keeps on changing with time. Due to the evolution of new technologies, several other pieces of information about researches come into existence. There are multiple methods used for

i) Keywords

The query for the Web of Science was classified into two blocks as primary keywords, secondary keywords, secondary keywords. The proposed keyword strategy applied for this research is mentioned in Table 1.

Table 1: The proposed keyword strategy

Primary Keywords (AND)	"e-voting using Blockchain"
Secondary Keywords	"iVote" or "I-voting" or "blockchain ballot" or "distributed online voting" or "electronic voting" or "blockchain enabled e-voting" or "blockchain based e-voting"

ii) Languages

The WoS database is the base of this research paper. Preliminary investigation through planned

keyword search tactic generated in all 38 publications. This is then restricted to publications in English only (Table 2).

Table 2: publishing languages trends.

(Source: <https://www.webofknowledge.com> accessed on 19th March 2021)

Type	Count	Percentage (%)
English	33	86.842 %
Korean	3	7.895 %
Italian	1	2.632 %
Polish	1	2.632 %

iii) Document Types

All types of publications retrieve from the result of the queries for the considered span are taken into

account. Majority of the extracted publications are published in article. There are 93% of journal article are published in WoS (refer Table 3).

Table 3: shows documents types published in WoS

(Source: visited [webofknowledge.com](https://www.webofknowledge.com) accessed on 19th March 2021)

Type	No. of publication	Percentage(%)
Article	35	92.105
Review	2	5.263
Early Access	2	5.264



iv) **Research Publication Trend**

The related documents were retrieved as journal papers, conference papers, articles, reports, etc., for the span of five years from 2017 to 2021. The

graphical representation of the yearly publication trends in e-voting system using blockchain is shown in Fig. 2. The trend increased in 2020.

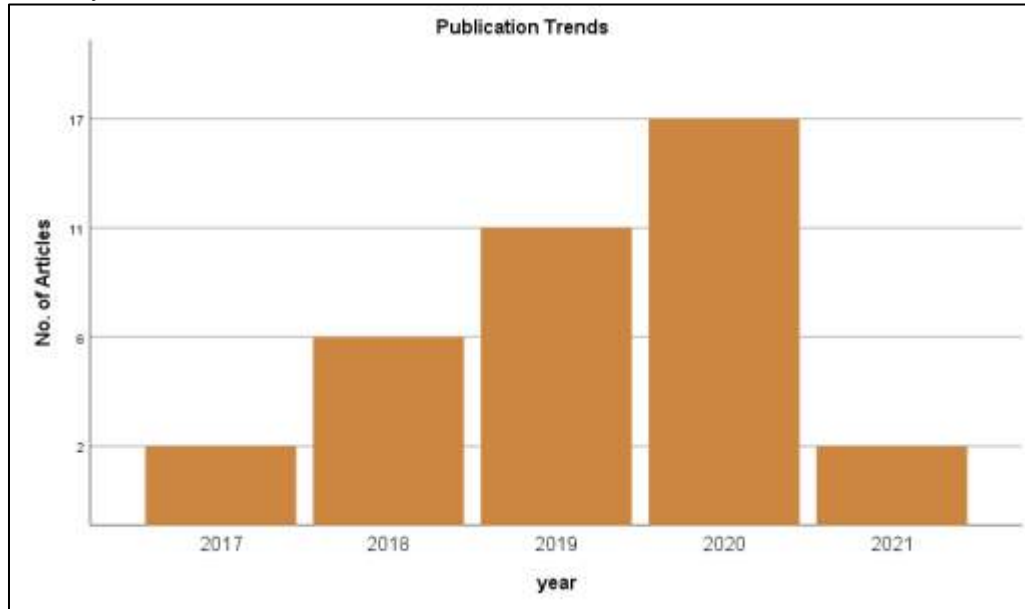


Fig 2: Research Publication trends

(Source: visited webofknowledge.com accessed on 19th March 2021)

v) **Author Statistics**

Fig. 5 depicts top 15 authors contributing and their affiliations to blockchain based

e-voting from WoS. It is clear from figure 4 that key contributing authors are Arshad J, Khan NM.

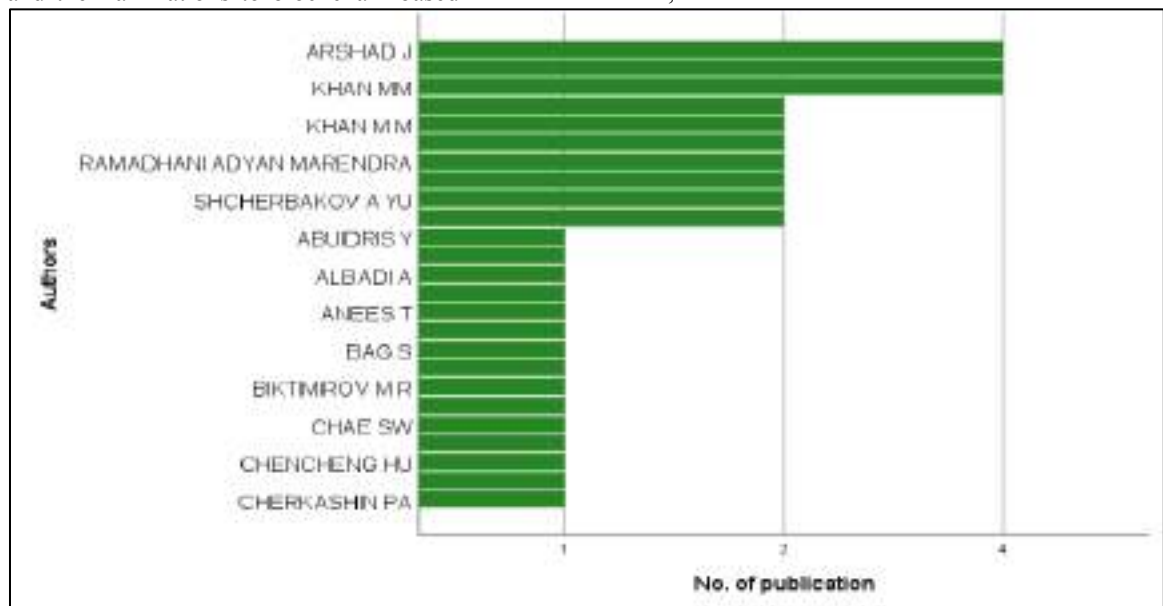


Fig 3: top 15 authors who have published papers in WoS on blockchain domain.

(Source: visited webofknowledge.com accessed on 19th March 2021)

vi) Geographical regional analysis

Fig. 4 gives countries having publications in the area of blockchain from WoS. England is the

prominent publishing countries for undertaken blockchain study.

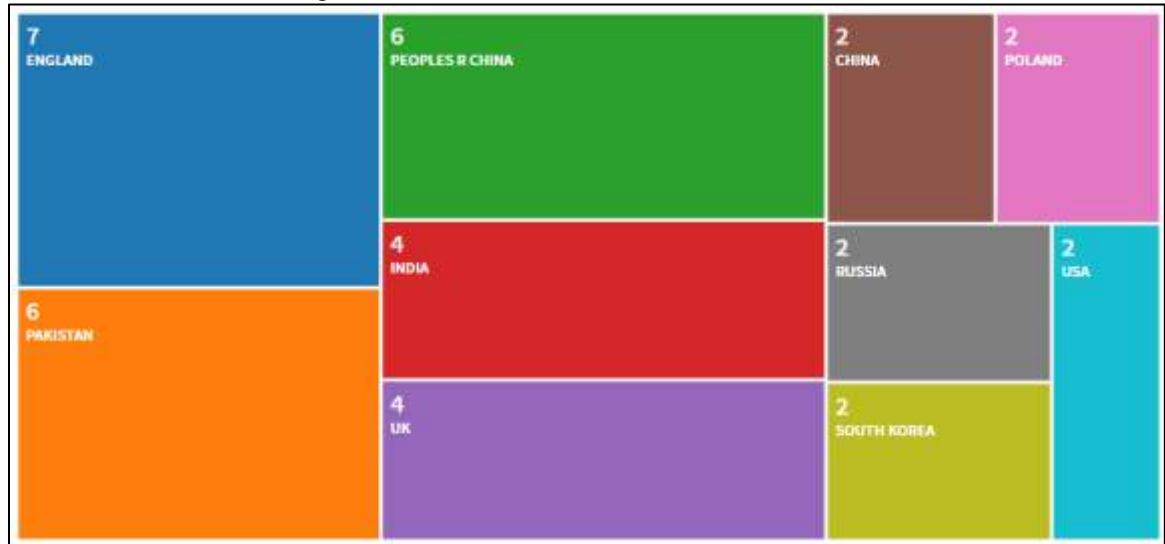


Fig 4: shows tree map indicating countries who are involved in publications related to blockchain

(Source: visited webofknowledge.com accessed on 19th March 2021)

vii) Source Statistics

Fig. 5 covers the publication journal in the area of blockchain. It is clear that maximum numbers of

publications are from IEEE Access followed by International Journal of Information Security.

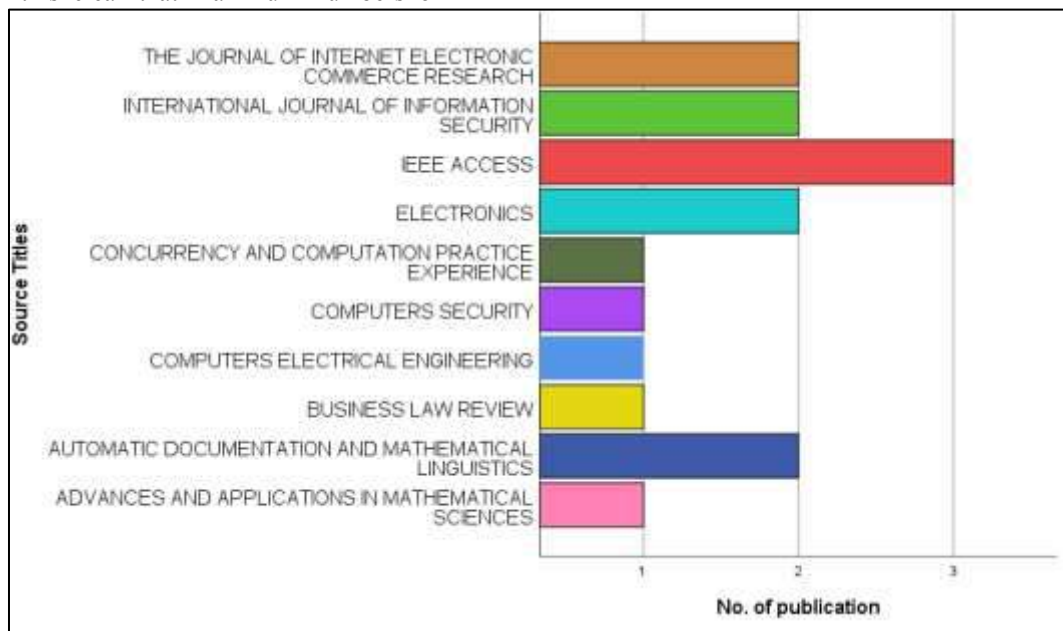


Fig 5: Journal statistics for Publications on topic blockchain in the ten most popular affiliations.

(Source: visited webofknowledge.com accessed on 19th March 2021)



IV. FUTURE RESEARCH DIRECTION

The blockchain based e-voting systems discussed and explained consist of various notable features in terms of their architecture and design. However, further improvements in the systems are possible, particularly in terms of increasing the scalability of the systems, in order to support practical large-scale voting scenarios. The presented research on e-voting systems using blockchain not only demonstrates the advantages of such a system in terms of security, reliability, dependability and transparency of the entire election process, but also encourages further research on utilizing frameworks like Hyperledger Sawtooth in designing an e-voting system to support scalability and practical application in realistic election scenarios. Table I summarizes the presented research.

Ensuring complete anonymity of the election process, by eliminating all correlation between voters and votes without the additional storage and computational overhead of separate blockchains for voter information and the vote information, is required.

Various existing designs for blockchain based e-voting systems incorporate the ability of the election administration to query the blockchain during the election process in order to check if the voter ID of the current voting block already exists in the blockchain, which introduces the possibility of inequitable misuse by accessing count of votes information during the election. This undermines the democratic principles and ideologies of a fair election, and thus, needs to be addressed using a better design of the blockchain implementation. Moreover, existing system designs utilize techniques like digital signatures and encryption to ensure the reliability of the system, but do not address scalability in the design decisions. The proposed solution aims at resolving these issues in a Hyperledger Sawtooth framework implementation, to ensure scalability using parallel transaction processing, and using two distinct divisions in a single blockchain, to ensure anonymity and fairness in the voting process.



TABLE I
COMPARISON OF VARIOUS EXISTING E-VOTING SYSTEMS USING BLOCKCHAIN

Article	KeyDesign Choice/ Algorithm	Highlights of Proposed System	Limitations/Possible Improvements
Ben Ayed. (IJNSA, May 2017) [7]	Candidate-specific blockchains	Describes Estonia’s I-Voting system and proposed a blockchain based e-voting system with each block consisting of block size, block header, transaction counter and transaction. A separate blockchain is used for each candidate.	Greater storage and processing overhead due to different blockchain for each candidate. Usage of a single blockchain can improve performance
Barnes et al. (2017) [5]	DistributedNode Architecture	The proposed system consists a scalable architecture for large-scale voting scenarios with national nodes managing constituency nodes which in turn manage local nodes. Different private/public key pairs within each constituency node and its corresponding local nodes improves security and decentralizes vulnerability. Two blockchains are used - one for voter information containing the voter’s vote token prior to voting, and one for the voter’s vote.	A robust, scalable and secure system proposed can be further improved by using Hyperledger Sawtooth to parallelize transactions.
Liu et al.(IACR, 2017) [8]	Blind Signature	Voting block consists of sender’s public key, receiver’s public key and vote message. Utilizes blind signature process to allow organizer and inspector to sign the vote hash without revealing the actual vote.	Though this verification process adds additional security to the system, it introduces greater latency and delay in large-scale e-voting scenarios.
Yu et al. (ISC, 2018) [9]	Hyperledger Fabric with Practical Byzantine Fault Tolerance	Utilizes Hyperledger Fabric as the blockchain framework, consensus using practical byzantine fault tolerance, and short linkable ring signature method for scalability	Proposed system can be further improved by utilizing Hyperledger Sawtooth, which supports parallel execution of transactions.
Ganji et al. (Dell EMC, 2018) [13]	Multi-chain framework based system	Specifies storage of votes in the form of assets, in a secure, usable and scalable manner. Multi-chain blockchain network is used in this proposed system, which limits each voter to a single	Proposed system consists of greater delay as secret message provided by each voter has to be verified by the TTP with the election commission, which then generates a reference number that can be used to view candidates and cast a vote.



		transaction. Trusted Third Party (TTP) is used to verify the validity of the voter using a secret message provided to the TTP by the voter.	
Hjálmarsson et al. (July 2018) [12]	Election as a smart contract	Proposed system consists of a district node which manages the smart contract of the boot node. Frameworks recommended are Exonium, Quorum and Geth.	Exonium is a paid system that can be utilized using cryptocurrency, making it expensive for large-scale implementation, when other free and equally-powerful frameworks are available. Quorum and Geth are Ethereum based frameworks which do not support parallel execution of transactions, which limits scalability and speed. Proposed system can be further improved by utilizing Hyperledger Sawtooth, which supports parallel execution of transactions.
Patil et al. (IRJET, Nov 2018) [10]	General explanation of blockchain based voting systems	Generalized e-voting system using blockchain is proposed with SHA encryption of voter information. The vote block is added to the selected candidate's blockchain.	A different chain for each candidate introduces greater overhead. The system does not discuss implementation using any specific framework. The advantages of blockchain based voting processes are highlighted.
Yi. (EURASIP, 2019) [14]	Elliptical Curve Cryptography	The proposed system utilizes elliptical curve cryptography in which voter generates signature of their vote block using a private key, with the signature verified using the voter's public key present in a Public Key Infrastructure database.	Even though the system proposes an elaborate procedure of verification of the vote blocks, the PKI database used is still a vulnerable, which if exposed, can invalidate the entire process.

V. CONCLUSION

To solve the problem of traditional voting systems, e-voting systems using blockchain is a promising research venture. Blockchain systems guarantee security, reliability, decentralized storage and anonymity. As a result, designing and implementing e-voting systems using blockchain ensures public and individual verifiability, dependability, reliability, consistency, auditability, anonymity, transparency, scalability, eligibility, authentication and fairness through principles of consensus, cryptography, digital signatures, and various blockchain mechanisms. The ideal implementation in terms of making the e-voting system faster, lighter and scalable is the Hyperledger Sawtooth framework, due to support for parallel processing of transactions. Further research can be performed into usage of frameworks like Hyperledger Sawtooth in designing and implementing realistic,

robust and practical e-voting systems which can be utilized in large-scale voting scenarios. The research presented not only encourages exploration of blockchain technology in practical voting processes, but also demonstrates the plausibility of utilizing blockchain to develop secure and reliable systems in a multitude of domains like finance, supply chain, trade and so on.

REFERENCES

1. Kirillov, Denis, Vladimir Korkhov, Vadim Petrunin, Mikhail Makarov, Ildar M. Khamitov, and Victor Dostov. "Implementation of an E-Voting Scheme Using Hyperledger Fabric Permissioned Blockchain." *In International Conference on Computational Science and Its Applications*, pp. 509-521. Springer, Cham, 2019.
2. Wang, Baocheng, Jiawei Sun, Yunhua He, Dandan



- Pang, and Ningxiao Lu. "Large-scale election based on blockchain." *Procedia Computer Science* 129 (2018): 234-237.
3. Moura, Teogenes, and Alexandre Gomes. "Blockchain voting and its effects on election transparency and voter confidence." In *Proceedings of the 18th Annual International Conference on Digital Government Research*, pp. 574-575. ACM, 2017.
 4. "Blockchain Tutorial." Weka, Solidity, Org.Json, AWS QuickSight, JSON.Simple, Jackson Annotations, Passay, Boon, MuleSoft, Nagios, Matplotlib, Java NIO, PyTorch, SLF4J, Parallax Scrolling, Java Cryptography. Accessed September 11, 2019. <https://www.tutorialspoint.com/blockchain/index.htm>
 5. Barnes, Andrew, Christopher Brake, and Thomas Perry. "Digital Voting with the use of Blockchain Technology." Plymouth University. Accessed Dezembro 15 (2016): 2017.
 6. Hardwick, Freya Sheer, Apostolos Gioulis, Raja Naeem Akram, and Konstantinos Markantonakis. "E-Voting with blockchain: an E-Voting protocol with decentralisation and voter privacy." In *2018 IEEE International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData)*, pp. 1561-1567. IEEE, 2018.
 7. Ayed, Ahmed Ben. "A conceptual secure blockchain-based electronic voting system." *International Journal of Network Security & Its Applications* 9, no. 3 (2017): 01-09.
 8. Liu, Yi, and Qi Wang. "An E-voting Protocol Based on Blockchain." *IACR Cryptology ePrint Archive* 2017 (2017): 1043.
 9. Yu, Bin, Joseph K. Liu, Amin Sakzad, Surya Nepal, Ron Steinfeld, Paul Rimba, and Man Ho Au. "Platform-independent secure blockchain-based voting system." In *International Conference on Information Security*, pp. 369-386. Springer, Cham, 2018.
 10. Harsha V. Patil, Kanchan G. Rathi and Malati V. Tribhuwan. "A Study on Decentralized E-Voting System Using Blockchain Technology". *International Research Journal of Engineering and Technology (IRJET)*. Volume: 05, Issue: 11, (Nov 2018).
 11. Fusco, Francesco, Maria Ilaria Lunesu, FILIPPO EROS Pani, and Andrea Pinna. "Crypto-voting, a Blockchain based e-Voting System." In *KMIS*, pp. 221-225. 2018.
 12. Hjálmarsson, Fririk., Gunnlaugur K. Hreiðarsson, Mohammad Hamdaqa, and Gísli Hjálmtýsson. "Blockchain-based e-voting system." In *2018 IEEE 11th International Conference on Cloud Computing (CLOUD)*, pp. 983-986. IEEE, 2018.
 13. Ganji, Raghavendra, and B. N. Yatish. "ELECTRONIC VOTING SYSTEM USING BLOCKCHAIN." (2018).
 14. Yi, Haibo. "Securing e-voting based on blockchain in P2P network." *EURASIP Journal on Wireless Communications and Networking* 2019, no. 1 (2019): 137.
 15. "What is a Digital Signature? - Definition from WhatIs.com." *SearchSecurity*. Accessed September 11, 2019. <https://searchsecurity.techtarget.com/definition/digital-signature>
 16. Sitoh, Paul. "What Are the Differences Between Ethereum, Hyperledger Fabric and Hyperledger Sawtooth?" *Medium*. Last modified February 14, 2019. <https://medium.com/coinmonks/what-are-the-differences-between-ethereum-hyperledger-fabric-and-hyperledger-sawtooth-5d0fc279d862>
 17. "Introduction - Sawtooth V1.0.5 Documentation." *Hyperledger Sawtooth*. Accessed September 11, 2019. <https://sawtooth.hyperledger.org/docs/core/releases/1.0/introduction.html>
 18. A. Chaudhari, and P. Mulay, "A bibliometric survey on incremental clustering algorithm for electricity smart meter data analysis," *Iran Journal of Computer Science*, vol. 2, no. 4, pp. 197–206, 2019.
 19. Archana Chaudhari, Rahul Raghvendra Joshi, Preeti Mulay, Ketan Kotecha, and P. Kulkarni, "Bibliometric Survey on Incremental Clustering Algorithms," *Library Philosophy and Practice (e-journal)*, vol. 2762, 2019.
 20. A. Chaudhari, and P. Mulay, "Algorithmic analysis of intelligent electricity meter data for reduction of energy consumption and carbon emission," *The Electricity Journal*, vol. 32, no. 10, pp. 106674, 2019/12/01, 2019.
 21. A. Y. Chaudhari, and P. Mulay, "Cloud4NFICA-Nearness Factor-Based Incremental Clustering Algorithm Using Microsoft Azure for the Analysis of Intelligent Meter Data," *International Journal of Information Retrieval Research (IJIRR)*, vol. 10, no. 2, pp. 21-39, 2020.



DEVELOPMENT OF A SCALE TO MEASURE UNIVERSITY TEACHERS' ASSESSMENT LITERACY IN OSUN STATE

Adediwura, Alaba Adeyemi¹ Ajayi, Oyedokun Samuel²

*¹Department of Educational Foundations and Counselling, Faculty of Education,
Obafemi Awolowo University, Ile-Ife*

*²Department of General Studies, School of Multidisciplinary Studies,
Bamidele Olumilua University of Education, Science and technology, Ikere Ekiti*

Article DOI: <https://doi.org/10.36713/epra6845>

DOI No: 10.36713/epra6845

ABSTRACT

The study developed a scale for measuring assessment literacy of university teachers and determined the validity and reliability of the scale. This is with a view of improving university teachers' assessment literacy. The study adopted the survey design. The population comprised all lecturers working in universities within Osun State. The sample consisted of 549 university teachers that were not in training position (lecturer II and above) from different disciplines selected using convenient sampling technique in all the eight accredited universities within Osun state. The study made use of three instruments namely; University Teachers Assessment Literacy Scale (UTALS), Teacher Self-Efficacy Scale (TSES) and Teacher Burnout Scale (TBS). The results showed that the 60- item UTALS was reduced to 43 items after the psychometric procedure of item retention and deletion were applied. Scree plot and eigen value methods showed that the final UTALS construct validity had seven factors of university teachers' assessment literacy that accounted for 86.46% of the total scale variance and it significantly converge and diverge with the Teacher Efficacy Scale ($r = 0.75$) and Teacher Burnout Scale (0.52) respectively. The internal consistency reliability of the scale was 0.96 (Guttman), 0.90 (Cronbach), and 0.96 (Spearman). The study concluded that the university teacher's assessment literacy scale developed in this study had adequate psychometric characteristics and is suitable for measuring assessment literacy of university teachers in Osun State. It was therefore recommended that the University Teacher's Assessment Literacy Scale be adopted by institutions of higher learning for the assessment of new and old academic staff members' assessment competency in order to help in the improvement of assessment standard of the institutions.

INTRODUCTION

Assessment is considered to be an important integral component in any instructional context and educational setting. In any higher institution of learning, it is a major business and plays at least two key roles; first in ensuring institutional quality and

accountability, and second, in improving student learning (Ewell, 2009). University lecturers' use of assessment affects the depth and quality of what students learn, their choice of learning strategies, how they manage their study time (Australian National Training Authority, 2002), and quite significantly, their



motivation to continue learning (Harlen and Crick, 2003). Thus, the importance of assessment cannot be overstated. In fact, according to Anderson (2004) and Hannafin, Hill, Oliver, and Glazer (2003), no factor influences a learning environment as much as assessment. It is thus assumed that every higher institution of learning is aiming for an assessment future that includes three active ingredients: (1) balanced assessment systems, or assessment systems that meet the information needs of all assessment users—not just those concerned with accountability; (2) quality assessments at all levels within such a system, all of which produce dependable information about student achievement; (3) productive assessment dynamics, reflecting a clear understanding of the emotional dynamics of the assessment experience from the learner's point of view. This is referred to as the concept of assessment for learning—that is, student involvement in the assessment process as a way to promote learning, not merely measure it.

The conduct of quality assessments requires that a teacher carefully consider key features of assessment. Stiggins, (1993) opined that such features include; teacher clarity about the purpose of the assessment, teachers need to start with a clear and appropriate vision of the learning target, designing assessment that is adequate and appropriate for the context and giving feedback of the results to intended user in a timely and understandable way. Aside the mentioned four quality assessment keys is another related key feature that ensure classroom effective use of assessments in the classroom: student involvement in the process while they are learning. As it turns out, students are key data-based instructional decision makers too maybe the most important ones. They can contribute most productively to their own learning success when we share with them student-friendly versions of the learning targets from the beginning of the learning.

The Nigeria educational system calls for the accountability of higher education in promoting student learning. In this regard, universities are expected to give paramount importance to two key components in the structure of academic programmes. They are: (i) clear and measurable programme learning outcomes, and (ii) quality assessment that is well-aligned with the intended outcomes. The relationship between these two components is an intricate one where the provision of clear and measurable learning outcomes is expected to guide the use and practice of assessment among university lecturers. However, many universities in Nigeria do not provide the lecturers with a clear policy

on assessment nor provide necessary training for lecturers on assessment practice, hence leaving them clueless as to the 'what' and the 'how' of student assessment. This evidence in Nigeria university lecturers' use of assessment that tends to be restricted to paper-and-pencil tests with quizzes and traditional formats (such as multiple choice, true-false and essay questions) being the most widely and frequently utilized methods. The use of alternative and authentic assessments (e.g. observations, demonstrations, portfolios, e.t.c.) was found to be uncommon among the lecturers. The adherence to traditional formats is known to be a long standing practice, and provides some indication as to what Nigerian university lecturers commonly understand to be student assessment. It also suggests that their assessment knowledge and practice have not improved much over the years thus the assessment literacy of Nigeria universities teachers come to question. In order for assessment to be effective, classroom teachers need to be assessment literate—knowledgeable about the key concepts of testing and how they can inform the design of assessments and decisions surrounding their usage. Knowing more about assessment will not only help you to assess your students more effectively, but it will also provide you with a means of evaluating your own teaching and help you to produce tests that will actually motivate your students to learn.

Assessment literates mean the ability to detect the differences between sound and unsound assessment (Stiggins, 1995). He specified that assessment-literate educators should be able to know: (a) the content and learning outcome to be assessed; (b) the purpose of having assessment; (c) the best way to assess the students' skills and knowledge; (d) the development of quality instrument to assess students' performance; (e) the potential problems with the assessment; (f) the prevention of the problem; and (g) the awareness of the potential negative consequences of poor, inaccurate assessment. According to the standards for teacher competence in the Educational Assessment of Students (American Federation of Teachers, National Council on Measurement in Education, National Education Association, 1990), there are seven standards for teacher competence in classroom assessment. Teachers should be skilled in: 1. choosing assessment methods that are suitable for the learning outcomes to be assessed; 2. developing assessment instrument that are suitable for the learning outcomes to be assessed; 3. administering, scoring, and interpreting the assessment findings of both externally-produced and teacher-



produced assessment; using assessment results perceptively when making decisions about students' learning, teachers' teaching, school development, program, or curriculum; developing the reliable and valid grading procedures; communicating and reporting efficiently the assessment results to students, parents, school administrators, and other educators; and recognizing the illegal, unethical, inappropriate uses of assessment information and methods of assessment.

Assessment literacy can be defined as the solid and sound educational assessment knowledge and skills that is required by teachers in assessing students' mastery of learning outcome. Thus, it is one of the most important responsibilities of teachers in classroom teaching and learning (Volante & Fazio, 2007). The effectiveness of teaching methods used in classroom is reflected by the quality of the assessments used. Therefore, the results gathered from classroom assessments should be reliable and valid. According to the research findings, the problems of lack of teachers' consensus on deciding the most beneficial and suitable assessment practices, limited assessment training, lack of assessment knowledge and skills may result in the teachers' variation in implementing the classroom assessment (Suah, 2012).

There has been a growth of expectations concerning Nigeria universities teachers' assessment knowledge and skills. Universities teachers were required to implement assessment professionally and creatively so as to align with the learning outcomes in the curriculum standards as a means of improving students' learning ability and performance and in turn provide the nation with high level man power that is required for the development of the country. A substantial part of university teachers' professional time is devoted to assessment-related activities. Optimal implementation of these activities requires strong knowledge and abilities in educational measurement. Teachers' knowledge and abilities in educational measurement have been equated to assessment literacy. It entails knowing what it is being assessed, why it is assessed, how best to assess it, how to make a representative sample of the assessment, what problems can occur within the assessment process, and how to prevent them from occurring. There is a concern on the adequacy of most university teachers' assessment literacy. However, the management of most Nigeria universities does not determine the assessment literacy level of their teachers at the point of entry into teaching profession and most often do not organize in-service training for them on fundamentals of educational assessment. Thus, assessment literacy of most

university teachers may be considered to be feeble and the issue of inaccurate and invalid educational assessment was mainly due to the unacceptably low levels of assessment literacy. As a result, it has prevented the students from reaching their full potential. Furthermore, little or no study are carried out by university management on teachers' adherence to the fundamental principles of educational assessment as recommended by experts when assessing students' learning quality, not much empirical studies have been carried out to validate existing Western teacher assessment literacy inventory for use among Nigeria university teachers and there is no known published locally developed scale in Nigeria with which this important attribute of a university teachers activities could be measured. This study is therefore, developed and validated a University Teachers' Assessment Literacy Scale (UTLS) for the measurement of university teachers' assessment literacy.

OBJECTIVES OF THE STUDY

The major objective of this study is to develop a valid instrument that is capable of measuring university teachers' assessment literacy. The specific objectives of the study are to develop a University Teachers' Assessment Literacy Scale (UTALS) for measuring assessment literacy of university teachers;

1. develop a University Teachers' Assessment Literacy Scale (UTALS) for measuring assessment literacy of university teachers;
2. determine the validity of the UTALS;
3. estimate the reliability of the scale;

RESEARCH QUESTIONS

The following research questions were raised to achieve the objectives of the study.

1. What items would be adjudged to measure university teachers' assessment literacy
2. What is the construct validity of the developed UTALS?
3. What is the convergent validity of the UTALS?
4. What is the divergent validity of the UTALS?
5. What is the factor structure of the developed UTALS?
6. What is the reliability of UTALS?

METHODOLOGY

The design employed for the study is the descriptive survey design. This is because the researcher is only interested in developing valid and reliable instrument with which university lecturers' assessment literacy



could be measured. The population for the study comprised all the 2,485 lecturers working in universities within Osun State Southwest of Nigeria. A total of 1640 (66.0%) of the teachers work in the two government owned universities in Osun State while the remaining 845(34.0%) work with private owned universities in the State. The sample consisted of 549 university teachers that were not in training position (lecturer II and above) from different disciplines. The university teachers were selected from all the eight National University Commission accredited universities in Osun State using convenient sampling. The sample comprised 339 male and 210 female lecturers. The sample also comprised 275 university teachers that were below the rank of Senior Lecturer, 199 Senior Lecturers and 75 university teachers above the rank of Senior Lecturer. A total of 305 of the selected university teachers were from public universities while the remaining 295 were from private universities.

The study made use of one self-developed instrument namely; University Teachers Assessment Literacy Scale (UTALS) and two adopted instruments; **Teacher Self-Efficacy scale (TSES)** and **Teacher Burnout Scale (TBS)**. The University Teachers' Assessment Literature Scale (UTALS), Teacher Self-Efficacy Scale (TSES) and the Teacher Burnout Scale (TBS) were administered simultaneously on the selected university lecturer by the researcher with the help of 6 trained research assistants.

RESULTS

Research Question 1: What items would be adjudged to measure university teachers' assessment literacy

To answer this question, the initial 60 items first version of University Teachers' assessment Literacy Scale (UTALS) (see Appendix I) was evaluated with the aim of determining their appropriateness for the scale. The correlation matrix was examined so as to ascertain the first quality, high inter-correlation of the items (DeVellis, 1991). The 60 items of the UTALS were Factor Analyzed. This method was chosen because the researcher was interested in understanding the underlying structure of a set of variables (Conway & Huffcutt, 2003). In the study, initial factor analysis of the 60 items loaded on nine factors and 10 of the 60 items had factor loadings less than 0.32 (Worthington & Whittaker, 2006) and/or loaded on more than one factor. The 10 items were then eliminated from further analyses to obtain a 50 item second version of VBS (See Appendix II). An investigation into the 50 items after a second round of factor analysis revealed that the 50 items loaded on seven factors with reliability estimate (Cronbach Alpha = 0.888), items mean (3.136) and inter-item correlation (0.155) with seven items that were not satisfactorily inter-correlated and that increased the reliability of the scale if they are deleted. The reduction of the second UTALS version was based on Govaerts and Gregoire(2008) item reduction criteria which stipulated that any item affected by the three or any two of the conditions below should be expunged.

- i. Items with Low Item Mean (LIM) 3.136 or less.
- ii. Items with Low Item total Correlation (LITC) of 0.155 and below.
- iii. Items having a High Cronbach's Alpha if Item Deleted (HCAID) of 0.888 or more.

After applying the rules, the following items as contained in Table 1 were retained in the developed university teachers' assessment literacy scale.

Table 1: University Teachers' Assessment Literacy Scale (Third and Final Version)

S/N OLD	S/N NEW	Statement
1	1	Application of what was learnt in class is best assessed using performance test
2	2	Accurate and consistence grading of students' knowledge dependds on developing a scoring rubric after getting a feel for what students can do
3	3	General impression on a student performance in a standardized test is only acceptable if the reliability of the test does not exceed 0.06
4	4	Assigning students' grade is an appropriate use of standardized test result
5	5	Students' prior performance before assigning a final grade should be considered in improving the validity of continuous assessment grading procedure
6	6	A student with 80 th percentile in a test is said to have scored 80% of the test items correctly
7	7	To appropriately use assessment information , scores from standardized test should be used to determine teacher instructional effectiveness



8	8	The choice of an assessment that covers single-step problem solving skills is the best for assessing students' problem solving abilities
9	9	Portfolio assessment is the most suitable for accurate assessment of students' performance in anticipation of how students will perform in an external exam
10	10	Receiving a percentile rank 60 in a nationwide assessment, will yield a student's that is national average
11	11	The result of a test in which a student received a scaled score of 196 with cut off score of 200 and standard error equal 6 should be ignored
12	12	Student's achievement is best reflected when grades are based on daily homework and chapter tests with point deducted for poor efforts
13	13	A student with scores 60 th and 56 th percentile in two different tests needs a remedial course on the test in which 56 th percentile is scored
14	14	Teachers should encourage students to practice with items from an alternate form of a high stake test to improve their performance
15	15	Item analysis should be carried out on each item of a test to examine the validity coefficient
16	16	A student is believed to know 85% of the content covered in an instructional unit if in a test scored using a 100-percent scale he/she scored 85
17	17	Norm- and criterion-referenced information is used when a teacher adjust his/her instruction based on pretest result
18	18	Grades assigned based on a single test could be biased against some minority students
19	19	The use of traditional assessment is involved when teacher assigned grades based on classroom observation
20	20	It is unethical for a teacher to use previous grades to adjust current grades
21	21	Teachers should check for clarity of sentence construction when designing story-based mathematics test
22	22	The primary purpose for conducting formative assessment that involve teacher quick "check in" on students understanding is to identify cumulative knowledge
23	23	Utilizing a holistic scoring method minimize teacher subjectivity in scoring
25	24	A test item with difficulty value between 0.50 and 0.75 should be discarded
26	25	Portfolio grading system is by teachers to detect students level of content mastery
27	26	Authentic assessment should be considered in testing application of what was learnt in the class
29	27	When comparison group is comprised of grade level peers, the general impression on a student's performance in a standardized test is acceptable
30	28	Standardized test result can be used to plan instruction
33	29	Utilizing information from a variety of assessments when making decision about student learning is an appropriate use of assessment information
34	30	Students' problem- solving abilities is assessed using an assessment that is consistent with the content and skills they were taught
36	31	A student with a percentile rank of 60 on the problem-solving skills subset of a statewide assessment score above average
40	32	In anticipation of an external assessment teachers should plan so that it focuses on concepts and skills to be covered on the test
42	33	I a test scored using a 100-percent correct scale, a score of 85% means answering 85% of the items on the test correctly
44	34	Decisions like grades should be based on more than one piece of information
50	35	To plan classroom instruction, teachers should do a quick "check in" on the students to get an impression of their understanding
51	36	Grading all responses to essay question 1 before grading responses to essay questions 2 remove inconsistency in scoring
52	37	To ensure that standardized test results provide an accurate picture of what students



53	38	really know, it is recommended that teachers clarify items that are confusing students
54	39	A diagnostic assessment is used to identify students specific difficulties
55	40	A test item with a discrimination value equal to -0.50 should be discarded
56	41	A restricted-response essay items that is concerned with students' demonstrating level of understanding of several specific criteria is best scored using analytic rubric
57	42	To enhance school improvement in standardized exam the teachers must ensure alignment between instruction and what is measured on the test
60	43	Criterion-referenced grading systems reflect each student's respective level of content mastery.
		Raw scores are purely criterion-referenced and percentile ranks are merely one form of norm-referenced scoring

Research Question 2: What is the construct validity of the developed UTALS?

To answer this question, the Kaiser or eigenvalues greater-than-one criterion (Kaiser, 1960) and scree test, which involves an examination of a plot of the eigenvalues for breaks or discontinuities was used to determine the construct validity. To do this the Spector (1992) Exploratory Factor Analysis (EFA) technique for studying the dimensionality of a scale was applied so as to explore the dimensionality of

UTALS with the aim of determining (a) the number of factors that best represent the items and (b) the interpretation of the factors.

From the initial eigenvalues as presented in Table 2, seven factors of university teachers assessment literacy emerged, which accounted for 86.457% of the total scale variance on the UTALS. The factor solution was in line with the initial assumption of the researcher (which was seven).

Table 2: Eigenvalues and total variance on the UTALS

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	9.747	20.668	20.668
2	8.174	17.010	37.678
3	6.583	13.310	50.988
4	6.362	12.796	62.784
5	5.847	11.598	73.382
6	3.868	8.996	81.378
7	2.184	5.079	86.457
8	.199	.463	
9	.032	.073	
10	.003	.007	
11	3.553E-016	8.262E-016	
12	3.237E-016	7.527E-016	
13	2.839E-016	6.603E-016	
14	1.979E-016	4.601E-016	
15	4.052E-017	9.422E-017	
16	2.192E-017	5.097E-017	
17	1.793E-017	4.170E-017	
18	1.187E-017	2.759E-017	
19	9.611E-018	2.235E-017	
20	6.703E-018	1.559E-017	
21	6.475E-018	1.506E-017	
22	4.906E-018	1.141E-017	
23	2.360E-018	5.488E-018	
24	1.156E-018	2.687E-018	
25	-1.308E-033	-3.043E-033	



26	-7.816E-033	-1.818E-032
27	-2.906E-019	-6.758E-019
28	-1.152E-018	-2.680E-018
29	-2.598E-018	-6.041E-018
30	-3.980E-018	-9.257E-018
31	-6.596E-018	-1.534E-017
32	-7.326E-018	-1.704E-017
33	-9.678E-018	-2.251E-017
34	-1.189E-017	-2.766E-017
35	-1.532E-017	-3.564E-017
36	-1.610E-017	-3.743E-017
37	-2.117E-017	-4.923E-017
38	-9.122E-017	-2.121E-016
39	-1.628E-016	-3.785E-016
40	-2.603E-016	-6.053E-016
41	-2.727E-016	-6.341E-016
42	-4.292E-016	-9.980E-016
43	-5.879E-016	-1.367E-015

The standardized factor loadings for the 43 items were statistically significant at $p < .05$. Thus, the standardized item loadings of the UTALS items showed that the instrument is valid. Scree plot was also

employed to further confirm the number of factors on which the UTALS items would load. The plot is as presented in Figure 1.

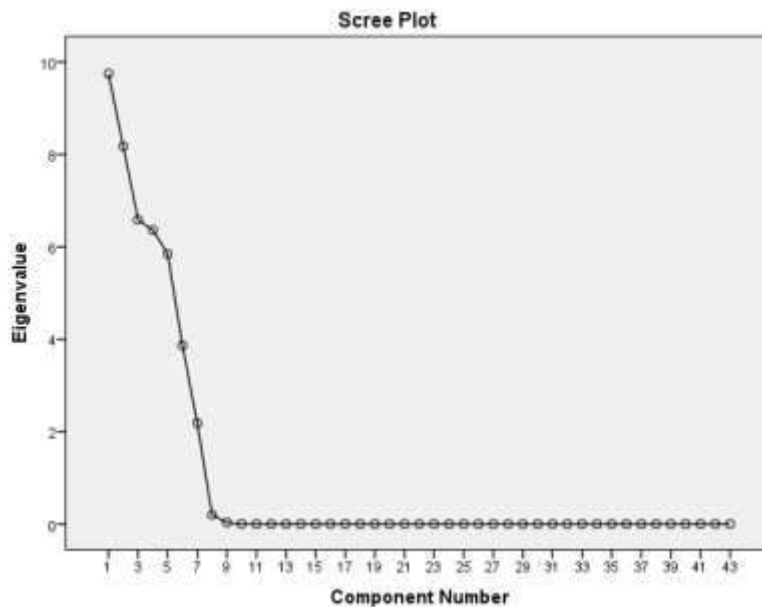


Figure 1: Scree plot showing seven factors on UTALS

The Scree plots in Figure 1 showed also seven factors on the UTALS and thus, confirm the number of factors in Table 2. Thus, there are seven factors on the developed University Teachers' Assessment Literacy

Scale (UTALS) for measuring university teachers' assessment literacy.



Table 3: The UTALS third version subscales and corresponding items

S/N	SUBSCALE	ITEMS
1	Developing Valid Grading Procedures	5, 12, 18, 23, 26, 44, 51, 57
2	Using Assessment Results	4, 11, 17, 22, 30, 50, 56
3	Administering, Scoring and Interpreting the Results	3, 10, 16, 36, 42, 55
4	Choosing Appropriate Assessment Methods	1, 8, 27, 29, 34, 53
5	Developing Appropriate Assessment Methods	2, 9, 15, 21, 25, 54
6	Communicating Assessment Result	6, 13, 19, 52, 60
7	Recognizing Unethical and Otherwise Inappropriate Assessment Methods	7, 14, 20, 33, 40,

Eight of the 43 items of the UTALS loaded on factor 1 (Developing Valid Grading Procedures). It could therefore be concluded that Developing Valid Grading Procedures is the most important of the factors. Seven items loaded on factor 2 (Using Assessment Results), which makes it next most crucial to the first factor on UTALS, Six items loaded on factor 4 and 5(Choosing Appropriate Assessment Methods and Developing Appropriate Assessment Methods) and five items loaded on each of factor 6 and 7 (Communicating Assessment Result and Recognizing Unethical and Otherwise Inappropriate Assessment

Methods). Thus, the 43 items on Table 1 were considered suitable and adequate to measure university teachers' assessment literacy

Research Question 3: What is the convergent validity of the UTALS?

To answer this question, scores from the Teacher Self-efficacy Scale (TSES) were correlated with those from the developed 43-item UTALS a related construct. Table 4 presents the result.

Table 4: Convergent validity of UTALS

	N	\bar{X}	SD	R	P
TSES	551	33.56	4.77	0.747	<.01
UTALS	545	131.72	12.67		

From Table 4, the correlation coefficient between the two scales, UTALS and TSES, was 0.477, which is significant at 0.01 level of significance. Since the TSES is a widely used scale with a significant Cronbach's alpha that was found to be between 0.76, and 0.82 using three samples for a period of one year and for a period of two years it was found to be .65. A high and positive correlation with it by the UTALS thus establishes the validity of the latter. That is, the

UTALS does measure university teachers' assessment literacy in Osun State.

Research Question 4: What is the divergent validity of the UTALS?

To answer this question, scores from the Teacher Self-efficacy Scale (TSES) were correlated with those from the developed 43-item UTALS a related construct. Table 5 presents the result.

Table 5: Divergent validity of UTALS from Teacher Burnout Scale (TBS)

	N	\bar{x}	SD	R	P
TBS	523	55.49	9.21	-0.517	<.01
UTALS	545	131.72	12.67		



From Table 5, the correlation coefficient between the two scales, UTALS and TBS, was -0.517, which is significant at 0.01 level of significance. Since the TBS is a widely used scale with a significant subscales Cronbach's alpha of 0.89 for career satisfaction, 0.84 for perceived administrator support, 0.80 for coping with job related stress, and 0.72 for Attitudes towards students. A negative correlation with it by the UTALS thus establishes the divergent validity of the latter. That

is, the UTALS does measure university teachers' assessment literacy in Osun State.

Research Question 5: What is the reliability of UTALS?

To answer this question, internal consistency reliability analyses were conducted on the 43-items final version of University Teachers' Assessment Literacy Scale using SPSS (version 20). The results were as presented in Table 6.

Table 6: Internal consistency reliability estimates of the UTALS

Reliability Type	Coefficient	No of Items
Cronbach Alpha	0.901	43
Spearman Brown (Split-half unequal Length)	0.963	43
Guttman Split-half Coefficient	0.962	43
Guttman	0.909	43

The results as presented in Table 6 showed that Cronbach Alpha coefficient of the UTALS was 0.901, while the Spearman Brown (split-half unequal length) coefficient was 0.963 and the Guttman coefficient was

0.909. These results are psychometrically satisfactory as opined by Devells (1991) cited by Adewolu (2006). Thus the UTALS can be considered reliable.

Table 7: University Teacher Assessment Literacy Scale Sub-scales Reliability

Sub-scale	Cronbach Alpha	No of Items
Developing Valid Grading Procedures	0.994	8
Using Assessment Results	0.899	7
Administering, Scoring and Interpreting the Results	0.914	6
Choosing Appropriate Assessment Methods	0.898	6
Developing Appropriate Assessment Methods	0.983	6
Communicating Assessment Result	0.918	5
Recognizing Unethical and Otherwise Inappropriate Assessment Methods	0.973	5

The result as presented in Table 7 showed that UTALS sub-factors estimated reliabilities are very high, indicating that the items were internally consistent and can be used to measure university teacher assessment literacy consistently.

DISCUSSION

Arising from the difficulties in the adoption of Assessment Literacy Inventory in measuring university teachers' assessment literacy, this study developed and validated a university academic staff self-report assessment literacy measure. University Teachers' Assessment Literacy Scale (UTALS) was developed within the framework of Standards for Teacher Competence in Educational Assessment of Students, (AFT, NCME, & NEA, 1990) and the current literature on teacher assessment literacy and practices. The UTALS was developed and analyzed within current frameworks of assessment. In this study the initial

items generated for University Teachers' Assessment Literacy Scale (UTALS) were 85 items. These items were moderated and reviewed by experts in the fields of Tests and Measurement and Educational Psychology to determine the appropriateness, relevance and adequacy of the items (content validity). This was then reduced to 60 items. The 60 items were then subjected to psychometric properties analyses. The 60-item UTALS was reduced to 43-item final version based on Govaerts and Gregoire (2008) item reduction criteria. The validity of UTALS was examined through construct, convergent and divergent validity while the reliability was examined through internal consistency. A factor analytical technique, principal component analysis, was applied to determine the underlying component structure of the UTALS.

The principal component analysis results with eigenvalues greater-than-one showed that the 43 items that final emerged on the UTAL converge on seven



distinct components. The loading of the items on the components were moderate to high, and all loadings but one were above 0.5. With the use of scree plot the seven factors on which UTALS loaded were confirmed. The seven factors are; Developing Valid Grading Procedures, Using Assessment Results, Administering, Scoring and Interpreting the Results, Choosing Appropriate Assessment Methods, Developing Appropriate Assessment Methods, Communicating Assessment Result and Recognizing Unethical and Otherwise Inappropriate Assessment Methods. All items were expected to correlate since the items were meant to represent the overall construct of university teachers' assessment literacy, the hypothesis that seven distinct components would emerge that lined up with each domain of assessment practices addressed in the UTALS was supported. This was in line with other studies that examine similar scales (Zhang, 1995; Burry-Stock & Frazier, 2008). With UTALS 43-items correlating into distinct components, the results suggested that the scale as a whole is a strong measure of university teachers' assessment literacy and thus, it allows researchers to examine and discuss university teachers' assessment literacy as a unidimensional construct. The items on the UTALS showed evidence of construct validity as the initial factor loadings on the data collected using T-CARS were statistically significant. These were good enough for declaring the UTALS usable for measuring the invisible believe that university teachers assessment literacy is capable of enhancing (or impeding) the success with which teaching task would be discharged. The convergent and divergent validity of the UTALS were determined by examining the relationship between total score on the UTALS and total score on 10-items TSES and 20-items TBS respectively. A coefficient of 0.747 and -0.517 for showed that the UTALS correlates highly with the TSES and TBS respectively and has acceptable convergent and divergent validity.

The results of the examination of the psychometric properties of the STAP demonstrated internal consistency reliability. Cronbach's alpha, Guttman's and Split-half coefficients respectively were 0.901, 0.909 and 0.962 for all 43 items, which shows that the UTALS has good internal consistency as asserted by Adewolu, 2006.

CONCLUSION

The study therefore concluded that the developed 43-item UTALS, based on the analyses that were carried out could be adjudged reliable and valid for the measurement of university teachers' assessment

literacy. It was therefore recommended that UTALS should be administered on university teachers upon their entry into the profession to ascertain their assessment literacy level and thus give insight on assessment competent skills training the teachers will require to be able to construct valid and reliable assessment tools.

REFERENCES

1. Adewolu, B. A. (2006). *The development and validation of a teacher efficacy scale for Nigerian secondary school teachers*. Unpublished Ph.D. Thesis, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria
2. American Federation of Teachers, National Council on Measurement in Education, & National Education Association. (1990). *Standards for teacher competence in educational assessment of students*. Washington, DC: National Council on Measurement in Education.
3. Anderson, T. (2004) *Teaching in an online learning context*, in Anderson, T. & Elloumi, F. (eds.), *Theory and practice of online learning*. Canada: Athabasca University, 273-294.
4. Australian National Training Authority (ANTA). (2002) *Assessment and online teaching: Australian flexible learning quick guide series*. Available at: <http://www.flexiblelearning.net.au/guides/assessment.pdf> (Accessed: 8 February 2019).
5. Burry-Stock, J. A., & Frazier, C. H. (2008, March). *Revision of the assessment practice inventory (APIR): A combined exploratory factor analysis and polytomous IRT approach*. Paper Presented at the American Educational Research Association, New York, NY.
6. Conway, J. M., & Huffcutt, A. I. (2003). *A review and evaluation of exploratory factor analysis practices in organizational research*. *Organizational Research Methods*, 6, 147-168.
7. Cortina, J. M. (1993). *What is coefficient alpha? An examination of theory and applications*. *Journal of applied psychology*, 78(1), 98-104.
8. DeVellis, R. F. (2003). *Scale development: theory and applications (2nd ed.)*. Newbury Park: Sage Publications
9. Ewell, P. T. (2009) *Assessment, accountability, and improvement: revisiting the tension*, NILOA Occasional Paper No.1, Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment. Available at: http://www.learningoutcomeassessment.org/documents/PeterEwell_005.pdf
10. Govaerts, S.O. and Gregory J. (2008). *Debt and Construct Validation of academic emotions scale*. *International Journal of testing* 8(1), 34-54
11. Hannafin, M., Hill, J. R., Oliver, K., and Glazer, E. (2003) *Cognitive and learning factors in webbased*



- distance learning environments*, in: Moore, M. G. and Anderson, W. G. (Eds.) *Handbook of distance education* Mahwah, NJ: Lawrence Erlbaum Associates.
12. Harlen, W., and Crick, R.D. (2003) *Testing and motivation for learning*, *Assessment in Education*, 10(2), 169-207.
 13. Spector, P. E. (2006). *Industrial and Organizational Psychology: research and Practice*. 4th edition. John Wiley & Sons, New Jersey.
 14. Stiggins, R. J. (1995). *Assessment literacy for the 21st century*. *Phi Delta Kappan*, 77.
 15. Suah, S. L. (2012). *Analisis model literasid anamal an pentaksiran guru sekolah sertaka jiantentan giurangan tarakeduanya (Analysis of literacy model and assessment practices of school teachers and study of the culture gap)* (Unpublished Ph.D. dissertation, School of Educational Studies, Universiti Sains Malaysia).
 16. Volante, L. & Fazio X. (2007). *Exploring teacher candidates' assessment literacy: Implications for teacher education reform and professional development*. *Candian Journal of Education*, 30(3), 749-770.
 17. Zhang, Z. (1995). *Investigating teachers perceived assessment practices and assessment competencies on the assessment practices inventory (API)*. The University of Alabama. *ProQuest Dissertations and Theses*, 163 p. <http://search.proquest.com/docview/304160100?accountid=10639>.



A STUDY ON MARKETING STRATEGIES TOWARDS CHINESE BRAND MOBILE PHONES WITH SPECIAL REFERENCE TO COIMBATORE CITY

***Mr. Aswanth Eswar .S, **Mr. D. Shanmugavadivel**

**Student of III B.com, Department of commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM085, Kalapatti Road, Coimbatore- 641 048*

***Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM085, Kalapatti Road, Coimbatore- 641 048*

ABSTRACT

This study is to know about a study on marketing strategies towards Chinese brand mobile phones with special reference to city. The data has been collected from 126 students in Coimbatore district by applying convenient sampling technique. Statistical tools such as percentage analysis, chi-square analysis, weighted score analysis have been used to analyse the data. The study has attempted to know the various demographic factors that determine the brand choice Chinese brand mobiles of a particular handset in the largely competitive oligopolistic market of India with several brands engaged in the war of marketing in the Indian market.

KEYWORDS: *Consumer preference, Features of mobilephones, Problems faced*

INTRODUCTION

Mobile phones have turned into a practically fundamental piece of everyday life since their quick development in prevalence in the late 1990s. An across the country review led in 2010 demonstrates that mobile phones are the most essential mode of correspondence for youths. It has for all intents and purposes influenced the general public's openness, security, wellbeing and coordination of business and social exercises and has thus turned into a piece of culture of the entire world.

With 820 million mobile customer base and 312 million 4G services users in China, China mobile is leading the voice services and data services business vertical. It is the largest 4G operator in the world, servicing 115 countries with the value-added service of International Roaming. With the help of enhanced wireless broadband services, it has achieved 30%

growth in wireless data traffic revenue in the year 2015 as compared to the year 2014.

Chinamobile

uses psychographics and demographics segmentation variables to cater to the needs of its tech-savvy customers. It uses a mix of differentiating and selective targeting strategies to provide services like Value added services & Wire line Broadband services to retail & corporate customers etc. With the socio-cultural and economic development of the China, data traffic business increased by a substantial percentage, and that's why China Mobile has repositioned itself with more of wire line & 4G LTE data provider than mere a communication network company.

STATEMENT OF PROBLEM

During 19th century markets was not so competitive. There was very few brands competing in



the market and there were people using mobile phones as they used to be very expensive. During 20th century many new brands of mobile phones have been introduced in the market. Even in our country new telecommunication companies have been established making the service very cheaper so that the service can be utilized by every common people of the country. Today mobile phones start from Rs.1000 to Rs.1,00,000 because of which today people have lots of options regarding mobile phones. Mobile phones have become very common to the people and life has become almost impossible without mobile phone. Apple and Samsung will always be the one comes to mind when consumers are reminded of brand of mobile phones. There is the brand equity as consumers are trust in their products' quality and find them reliable. There are some past studies stating that brand of China is always considered low quality, counterfeited and cheap by the consumers. However, the improving of the economy of China had changed these perceptions of consumers slowly. Recently, some mobile phone of China brand such as Xiaomi and Lenovo had done well in the Malaysia market. However, their market share is still not comparable to the famous brand like Apple and Samsung. In response to this, this research proposed to investigate this problem. With country of origin as a whole concept, several factors will be investigated and find out their relationship with the purchasing intention on mobile phones of China brand.

SCOPE OF STUDY

Deployment of Chinese mobile phone brands and their supply chain in India. Development of Chinese smart phones market, touching on the shipments of 4G smartphones in china. Development of the Indian smartphone market and includes Chinese brands; market presence, smartphone demand and 5G phone sales in china. India's policies for smartphones, including the phased Smartphones Manufacturing Program and preferable policies for smartphones, foreign investments, and taxation rates. Smartphones supply chain in India, touching on the production and R&D of Chinese smartphone brands and ODMs in India. Outlook for the Indian smartphone industry and its supply chains.

OBJECTIVES OF STUDY

The study is aimed to achieve the objectives following:

1. To study the significance impact of price on the purchase intention.
2. To know about the perceived quality on the purchase intention.

3. To analyze the brand awareness on the purchase intention.
4. To analyze the Availability & Visibility of various brand of products with special reference to Chinese mobile.
5. To collect the consumer preference to various brands of Chinese Mobiles through the Retailers.

RESEARCH METHODOLOGY

Research Methodology is a systematic and scientific approach for acquiring information on a specific topic. It helps in searching the facts by using different methodologies. The purpose of this chapter is to concentrate on methodology used for research by using the right methods and applying right tools to process to provide conclusion with solutions.

The study conducted was descriptive in nature and it was aimed to evaluate "AN STUDY ON

MARKETING STRATEGIES TOWARDS CHINESE BRAND MOBILE PHONES WITH SPECIAL REFERENCE TO CITY."

FORMULATING THE RESEARCH PROBLEM

INSTRUMENTATION:

For the purpose of the study, a structured questionnaire was designed with 26 questions. It consists of open-end questions.

SAMPLE SIZE

A sample of 126 respondents was chosen, using random sampling technique.

ADMINISTRATION OF THE INSTRUMENT

The schedule had open end questions for easy administration to the respondents and the responses were collected through Google Forms.

DATA COLLECTION METHOD

Primary data

The primary data was collected with the help of structured questionnaire using convenient sampling methods among 126 respondents.

Secondary data

Secondary data consist of information that already exists somewhere, having been collected for some other purpose. In this study, the secondary data was collected from studies, journals and websites.



DATA ANALYSIS

The data collected for the study was analyzed with suitable statistical tools. The statistical tools that are used in the study are as follows;

- Simple Percentage analysis
- Weighted average analysis
- Chi-square test analysis

PERIOD OF STUDY

- The study was conducted during the year December 2020 – March 2021

LIMITATIONS OF THE STUDY

1. The study confined to Coimbatore city and hence the results cannot be generated to other areas.
2. Internal prejudice of the respondents serves as a limitation of the study.
3. Due to time constraints, the number of respondents taken for the study is limited to 126.
4. The respondent’s views and opinion may hold good for the time being and may vary in future.

LITERATURE REVIEW

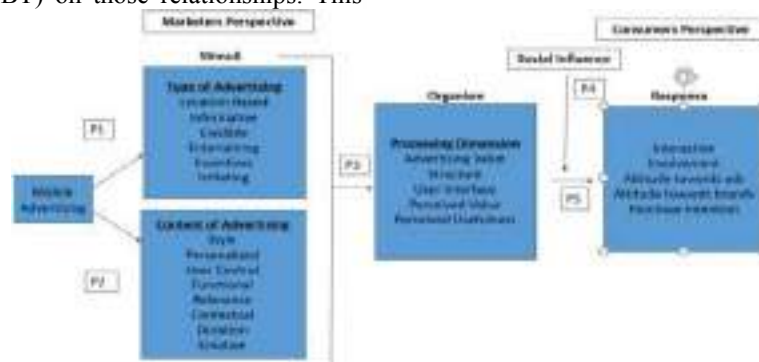
- **Mabkhot, H. (2016)** to investigate the relationships between brand image (BI), brand experience (BE), brand personality (BP), and brand loyalty (BL) of automobile local brands in Malaysia and also determining the mediating effect of brand satisfaction (BS) and brand trust (BT) on those relationships. This

study is embarked on the fact that only a few studies have examined how brand image, brand experience, brand personality, brand satisfaction, and brand trust contribute towards the emergence of brand loyalty. Based on a theoretical consideration, a model was proposed and 17 hypotheses were formulated

- **Guo, X & Yan, K. (2017)** study first selects the best-suited among the logistic, Gompertz, and Bass models to forecast the per capita holding quantity of mobile phones. Combined with the population projected by the GM (1,1) and logistic models, the spatial distribution of waste mobile phones is uncovered through the stock-based model. Finally, a mixed-integer programming model is established to optimize the location of recycling centers upon the spatial distribution of waste mobile phones. Accordingly, the logistic model is concluded as the best-suited in terms of forecasting the per capita holding quantity of mobile phones for all 31 provinces in mainland China.

MARKETING IN INDIA

India is one of the fastest growing smartphone markets globally and Chinese Mobiles had begun manufacturing in India. In year 2015 these companies have started manufacturing unit in Andhra Pradesh, Noida, Greater Noida and Chennai. Here is the list of 5 Chinese mobile companies, assembled and manufacturing smartphones in India as part of Make in India initiative.





SIMPLE PERCENTAGE ANALYSIS

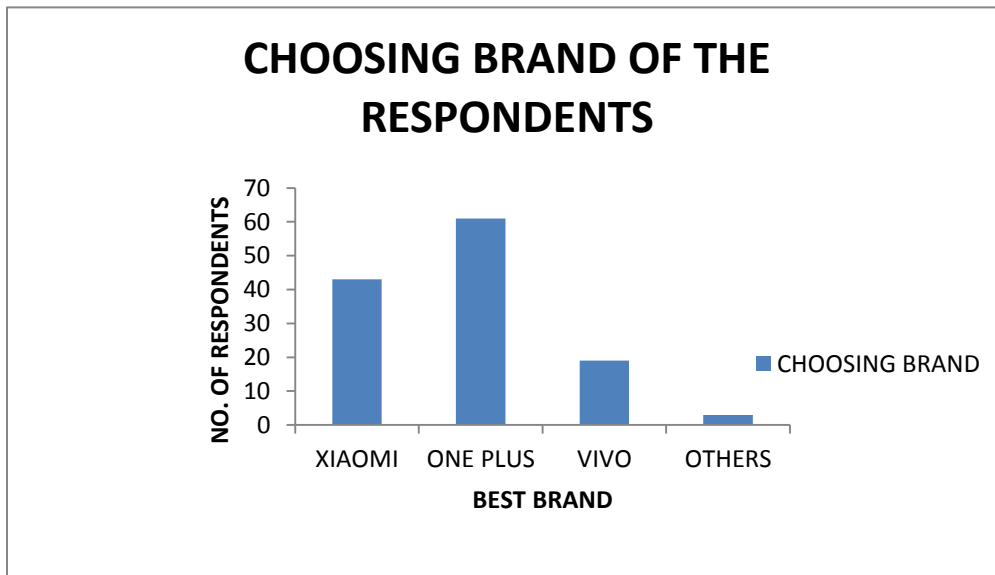
BEST BRAND OF CHINESE MOBILE RESPONDENTS

BEST BRAND	NO. OF RESPONDENTS	PERCENTAGE
XIAOMI	43	34.1
ONE PLUS	61	48.4
VIVO	19	15.1
OTHERS	3	2.4
TOTAL	126	100

INTERPRETATION

The above data shows that, 34.1% of them choosing Xiaomi is the best brand; 48.4% of them choosing One

plus is the best brand; 15.1% of them choosing Vivo is the best brand; 2.4% of them choosing other brands.

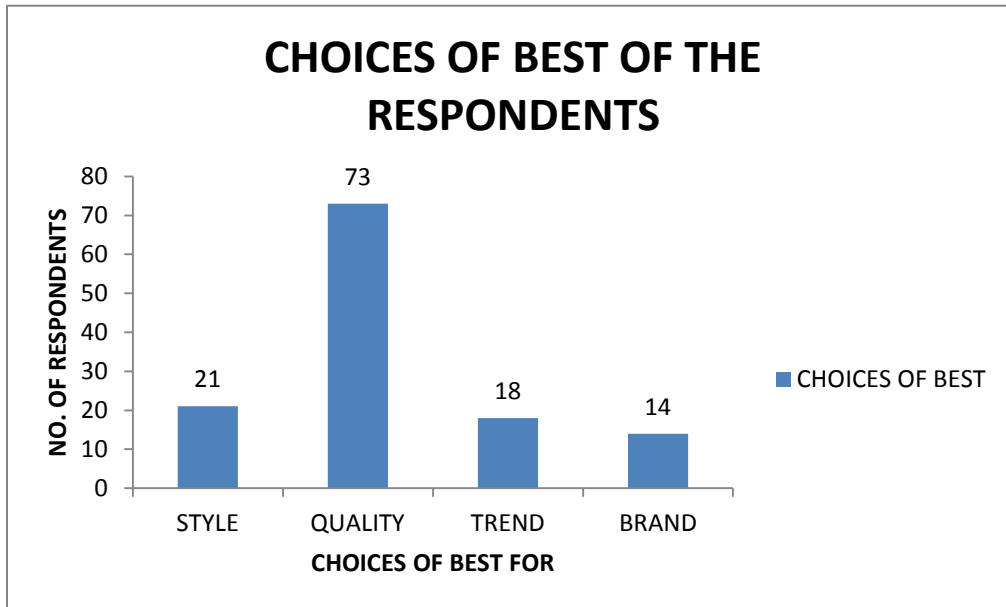


BEST CHOICE WHILE BUYING OF THE RESPONDENTS

BEST CHOICE	NO. OF RESPONDENTS	PERCENTAGE
STYLE	21	16.5
QUALITY	73	57.9
TREND	18	14.2
BRAND	14	11
TOTAL	126	100

INTERPRETATION

The above data shows that, 16.5% are choosing for style; 58.3% are choosing for quality; 14.2% are choosing trend; 11% are choosing for brand.



WEIGHTED AVERAGE ANALYSIS

Best brand of china mobiles

FACTORS	1(4)	2(3)	3(2)	4(1)	TOTAL	MEAN SCORE
XIAOMI	54 216	36 108	22 66	14 14	126 404	3.206
ONE PLUS	51 204	53 159	18 36	4 4	126 403	3.198
VIVO	17 68	71 213	32 64	6 6	126 351	2.785
OPPO	21 84	58 174	34 68	13 13	126 339	2.690
HUAWEI	13 52	68 204	36 72	9 9	126 337	2.674
LENOVO	14 56	43 129	57 114	12 12	126 311	2.468

INTERPRETATION: The above table justifies, best brand of china. The highest mean score or average is 3.206 for XIAOMI brand is best mobile brand of china.

CHI-SQUARE TEST

AGE GROUP AND PERIOD OF USING

HYPOTHESIS:

There is a significant relationship between respondent's age and the period of using the Chinese brand mobile phones.



AGE	PERIOD				TOTAL
	LESS THAN 1 YEAR	1 TO 3 YEARS	3 TO 5 YEARS	MORE THAN 5 YEARS	
BELOW 20 YEARS	17	20	1	6	44
21 – 30 YEARS	14	39	16	5	74
31 – 40 YEARS	0	4	3	0	7
ABOVE 40 YEARS	0	1	0	0	1
TOTAL	31	64	20	11	126

FACTOR	CALCULATED VALUE	D. F	TABLE VALUE	REMARKS
AGE	19.574a	9	16.92	REJECTED

INTERPRETATION

The calculated value of chi-square is more than the table value. Hence, the hypothesis is rejected stating that there is a significant relationship between the age and the period of using the Chinese brand mobile by the consumers.

FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- Majority of the respondents are **Male (57.1%)**.
- Majority of the respondents belong to the age group of **21-30 years (58.7%)**.
- Majority of the respondents are **Unmarried (87.3%)**.
- Majority of the respondent's **education qualification is UG (70.6%)**.
- Majority of the respondents income was **below 20000 (50.8%)**.
- Majority of the respondents are **Student (61.1%)**.
- Majority of the respondents are in **nuclear family (71.4%)**.
- Majority of the respondents are **2 to 4 members (69%)**.
- Majority of the respondents are prefer **one plus brand (31.7%)**.
- Majority of the respondents are best brand as **one plus (48.4%)**.
- Majority of the respondents are using **1 to 3 years (50.8%)**.
- Majority of the respondents are choosing for **quality (57.9%)**
- Majority of the respondents are aware of **service facility (YES) (74.6%)**
- Majority of the respondents are based on **brand name (33.3%)**.

- Majority of the respondents **owe for necessity (62.7%)**.

WEIGHTED AVERAGE ANALYSIS

- It is concluded from the analysis that majority of the respondents are highly satisfied with the price of Chinese brand mobile phones.
- It is concluded from the analysis that majority of the respondents are highly satisfied with the quality of the Chinese brand mobile phones.
- It is concluded from the analysis that majority of the respondents are highly satisfied with the importance of the brand.
- It is concluded from the analysis that majority of the respondents are highly satisfied with the product and services of brand.
- It is concluded from the analysis that majority of the respondents are highly satisfied with the reason for buying Chinese brand mobile phones.
- It is concluded from the analysis that majority of the respondents are highly satisfied with the best brand of Chinese mobile phones.

CHI-SQUARE TEST ANALYSIS

- There is a significant relationship between respondent's age and the period of using the Chinese brand mobile phones.
- There is no significant relationship between respondent's monthly income and brand preference of consumer's for Chinese brand mobile.

SUGGESTIONS

- Provide more features and better quality than
- When compared to other phone Chinese phones are over heat.



- My suggestion is that give better quality products with affordable price make good quality products.
- Come up with new trending models with high quality.
- Decrease heating and radiation.
- There should be an improvement in quality of Chinese smartphones.
- The price of the mobile phone has to affordable for quality.
- Indian government have to take steps to improve marketing of Indian made smartphones as like as marketing of Chinese smartphones.

CONCLUSION

Through the research paper entitled, "A STUDY ON MARKETING THROUGH SOCIAL MEDIA AND BOOKMARKING SITES "it is concluded that the demographic variables such as age group, gender are having more impact on the factors of social media marketing.

The anti-china sentiment post the India-China standoff at Galwan Valley in May has had little impact on the Chinese smartphone makers in India. Not only did the Chinese smartphone makers — Xiaomi, Redmi, Vivo, Realme and Oppo — topped the list like before; the season (July-September) also marked record sales in a single quarter with smartphone shipments of nearly 50 million units.

According to the head of China Mobile, China's home-grown mobile technology is a few years behind that of its international competitors since it was having problems with handsets.

Essentially 3G technologies were lagging behind. Part of the problem was the choice to swap to TD-SCDMA's network which many would consider inferior to the 3G technology offered by Vodafone. And China Unicom wants to become the biggest 3G operator in China .So in order to take competitive advantages from their competitors; they should start implementation of 3G technology.

4G mobile services, which are around five times faster than 3G, were first made available in China in 2012 on a trial basis. State-owned China Mobile, China Telecom and China Unicom were granted 4G licences in November 2013. The growth in 4G take-up in China is set to continue, according to IHS. Shipments are expected to double next year to 144.1 million units, jump another 53 percent to 219.8 million in 2016 and end 2017 at 298.5 million units.

REFERENCES

1. Guo, X & Yan, K. (2017). Estimation of obsolete cellular phones generation: A case study of China, *The Science of the total environment*, 575, 321-329. DOI: 10.1016/ scitotenv.2016.10.054
2. Mabkhot, H. (2016). *The Direct and Indirect influence of Brand Image, Brand Experience, and Brand Personality on Brand Loyalty*
3. www.google.com
4. <https://shodhganga.inflibnet.ac.in/handle/10603/21293>
5. <https://www.scribd.com/document/110167376/Project-Report-Chinese-Mobile>



A STUDY ON CUSTOMER PREFERENCE AND SATISFACTION TOWARDS REDMI MOBILE PHONE WITH SPECIAL REFERENCES TO COIMBATORECITY

***Ms. Harini .S, **Mr. D. Shanmugavadivel**

**Student of III B.com, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM083, Kalapatti Road, Coimbatore- 641 048*

***Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM083, Kalapatti Road, Coimbatore- 641 048*

ABSTRACT

The purpose of this study on customer preference and satisfaction will help us to understand the needs & Wants of the customers towards Redmi mobile phone. The study could provide appropriate and timely information about the position of preference level of customer towards Redmi mobile phone. As the objectives of this study is to analyze the customer satisfaction and to find out the consumer preference towards the brand Redmi mobile phone. This study also investigate the services and factors which influence the customers to purchase the Redmi mobile phone and also identify what customers are expecting from the Redmi. To know about the customer satisfaction and factor which influence the customer's preference in buying decision process. Customer satisfaction is influenced strongly by culture, social, personal and psychological factors. For this purpose, 125 customers were selected and obtained the various responses based on the questionnaire method. By and large it was found that most of the customers are choosing Redmi mobile phone because of its battery capacity, quality, price and camera clarity etc.

KEYWORDS: *Mobile production, Consumer Satisfaction, Problems faced by the product*

INTRODUCTION

Customer is an individual, group of individuals or an organization who receive or may receive goods, services, products or ideas from another individual or a company in return of value which can be money or anything of equivalent value. Consumer preference is defined as the subjective tastes of individual consumers, measured by their satisfaction with those items after they've purchased them. This satisfaction is often referred to as utility. Consumer value can be determined by how consumer utility compares between different items.

STATEMENT OF THE PROBLEM

Mobile phone has now become the basic need of

every person in their life. Understanding of brand preference is essential aspects as it reflect the customer . choice, purchase of particular brand, performance, style and satisfaction of the customer. Along with the smartphone fundamental capabilities to make voice call, and SMS and MMS, smart phones have been repositioned as a“new information medium”.

OBJECTIVES

- To study the socio economic characteristics of the sample respondents.
- To know the level of satisfaction of customers towers Redmi mobile phones.
- To analyse the awareness level towards the Redmi phones in terms of features, problems,



services etc...

- To study the factors to be considered while purchasing Redmi phones.

SCOPE OF STUDY

- The main scope of the study is to analyze the customer satisfaction towards Redmi mobile phone.
- This study helps to know the factors which influencing the consumer to purchase of Redmi mobilephones.
- This study helps to analyze the customer satisfaction level of Redmi mobile phones usage.

RESEARCH METHODOLOGY

In this study have been comprised both descriptive & analytical methods. The Primary data have been collected from the respondents are beneficiaries of the study. The secondary data have collected from the journals, magazines, newspaper, website and so on.

- **Sampling Design**
The researcher has been collected the data from 75 respondents in Redmi users in Coimbatore city.
- **Geographical Coverage**
This study covered in Coimbatore city only.

LIMITATION OF THE STUDY

- This study is confined to Coimbatore city only.
- Due to time constrains, 125 respondents were selected for the purpose of the study
- There is chance for biased respondents, which may affect the result of the study.
- Ideas of 125 respondents may not reflect view of the whole universe.

LITERATURE REVIEW

- Nasr Azad; Ozhan Karimi; Maryam

Safaei (2012) had presented an empirical study to investigate the effects of different marketing efforts on brand equity in mobile industry. The results show that there is a positive and meaningful relationship between marketing mix efforts and brand equity. In other words, more advertisements could help better market exposure, which means customers will have more awareness on market characteristics. Among all mixed efforts, guarantee influences more on brand equity, which means consumers care more on product services than other features. Finally, among different characteristics of brand equity, product exclusiveness plays an important role. In other words, people are interested in having exclusive product, which is different from others.

- **Androulidakis ; G. Kandus (2011)** correlated the brand of mobile phone to users' security practices,. Users show different behavior in an array of characteristics, according to the brand of the mobile phone they are using. As such, there is a categorization of areas, different for each brand, where users are clearly lacking security mind, possibly due to lack of awareness. Such a categorization can help phone manufacturers enhance their mobile phones in regards to security, preferably transparently for the user.
- **Luca Petruzzellis (2010)**, referred and concluded that technology nowadays is overcome by customer preferences and needs. In particular, the role of the brand is to be analysed with respect to its influence in shifting customer preferences from the technical performances (tangible elements) to the emotional/symbolic ones (intangible elements). The researchers had provided an analysis of the brand attitude and perception tested and viewed through user eyes.

Nasr Azad; Ozhan Karimi; Maryam Safaei (2012), "an empirical study to investigate the effects of different marketing efforts on brand equity in mobile industry" Management Science Letters 2(4) : 1435-1440
Androulidakis ; G. Kandus (2011) "the brand of mobile phone to users' security practices" No.2 30-35
Luca Petruzzellis (2010), "Technology nowadays is overcome by customer preferences and needs" European Journal of Marketing 44(5) : 610-634



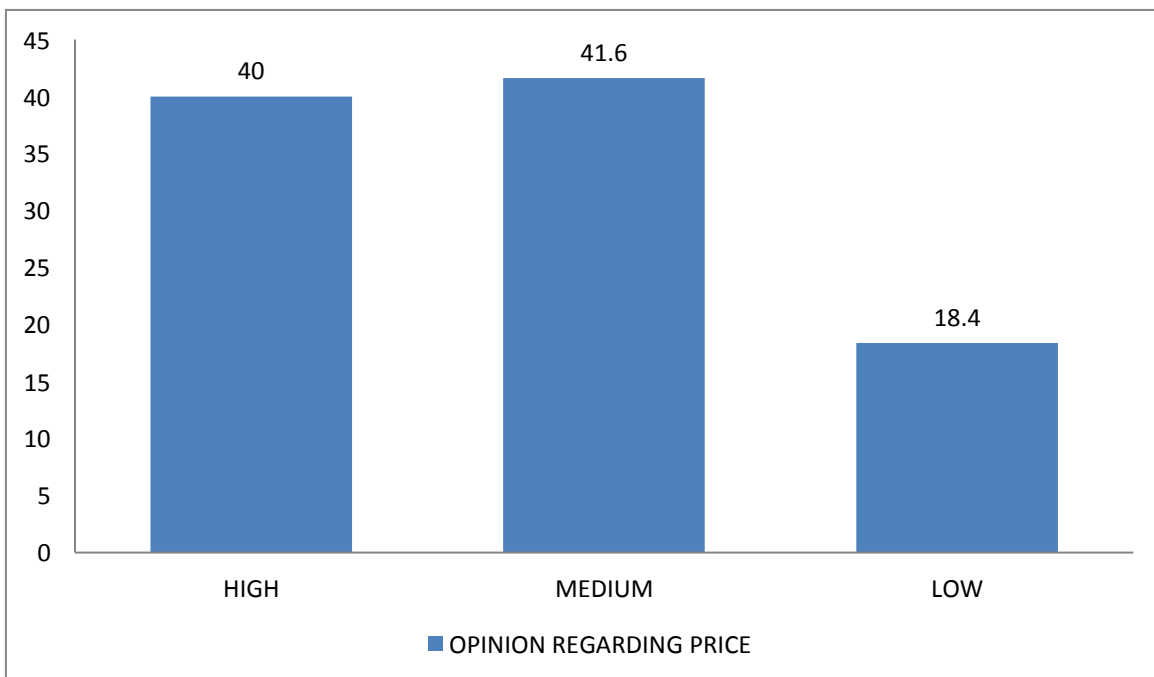
**ANALYSIS AND INTERPRETATION
OPINION REGARDING PRICE**

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
HIGH	50	40.0
MEDIUM	52	41.6
LOW	23	18.4
TOTAL	125	100

INTERPRETATION

The above table shows that 40% of the respondents opinion regarding price is high;41.6% ismedium and 18.4% is low.

Majority of the respondents opinion regarding price is medium (41.6%).



PROBLEM

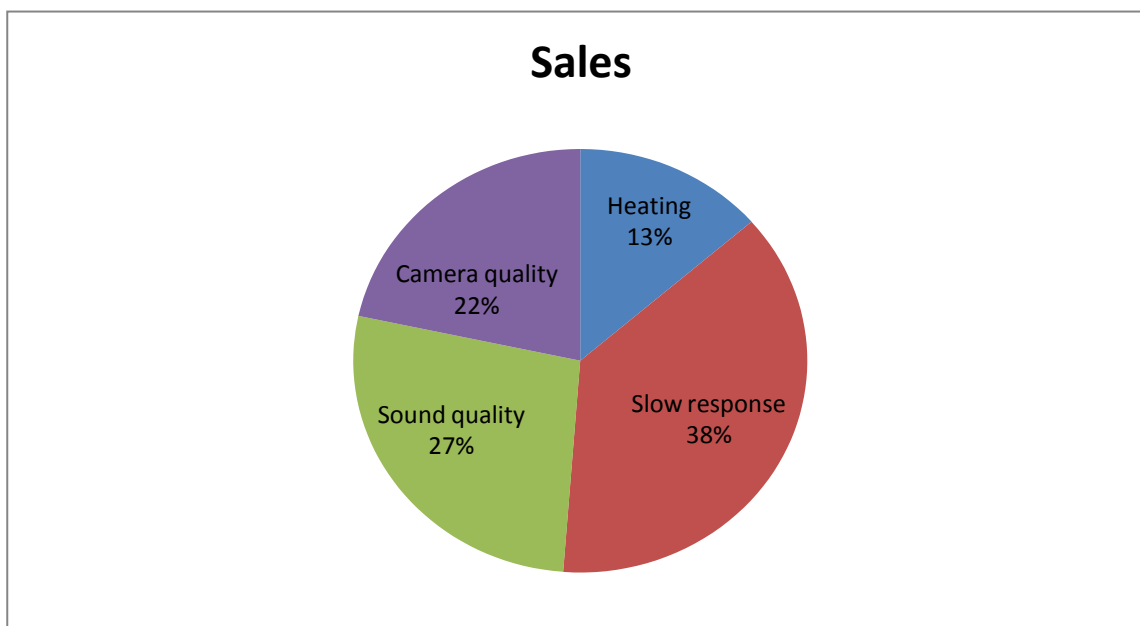
PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
HEATING	17	13.6
SLOW RESPONSE	47	37.6
SOUND QUALITY	34	27.2
CAMERA QUALITY	27	21.6
TOTAL	124	100

INTERPRETATION

The above table shows that 13.6% of the respondents problem is heating; 37.6% is slowresponse;27.2% is sound quality;21.6% is camera quality and 21.6% is

others.

Majority of the respondents problem is slow response (37.6%).



CHI SQUARE ANALYSIS

OCCUPATION	PREFERENCE OF REDMI				TOTAL
	SOUND QUALITY	CAMERA QUALITY	STORAGE	BATTERY CAPACITY	
PRIVATE EMPLOYEE	17	0	0	0	17
SELF EMPLOYEE	0	47	0	0	47
GOVERNMENT	0	0	34	0	34
STUDENT	0	0	0	27	27
TOTAL	17	47	34	27	125

FACTOR	ALCULATED VALUE	D. F	TABLEVALUE	REMARKS
OCCUPATION	375.000 ^a	9	16.92	ACCEPTED

INTERPRETATION

The calculated value of chi-square is more than the table value. Hence, the hypothesis is accepted stating

that there is no significant relationship between the Occupation and the Preference of Redmi Mobile.



RANKING ANALYSIS

PROBLEM	1(5)	2(4)	3(3)	4(2)	TOTAL	RANK
SERVICES	17	46	34	28	125	IV
	9	40.5	80.5	111.5	241.5	
SOUND QUALITY	16	47	34	28	125	V
	8.5	40	80.5	111.5	240.5	
CAMERA CLARLITY	18	48	33	26	125	III
	9.5	42.5	83	112.5	247.5	
BATTERY CAPACITY	53	14	38	20	125	I
	27	60.5	86.5	115.5	289.5	
STORAGE CAPACITY	27	48	34	16	125	II
	14	51.5	92.5	117.5	275.5	

INTERPRETATION

From this Ranking analysis, it is found that the people consider battery capacity as the primary level of their satisfaction.

Majority of the respondents consider battery capacity as the primary level of their satisfaction towards Redmi mobile phone.

FINDINGS

- Majority of the respondents are **Female (50.4%)**.
- Majority of the respondents belong to the age group of **21-30 years (38.4%)**.
- Majority of the respondents belong to the martial status is **unmarried (58.4%)**.
- Majority of the respondents educational qualification is **under graduation (37.6%)**.
- Majority of the respondents receive income **15001 to 20000 (39.2%)**.
- Majority of the respondents are **self employed (37.6%)**.
- Majority of the respondent's family nature is **joint family (50.4%)**.
- Majority of the respondents have **2 to 3 family members (42.4%)**.
- Majority of the respondents are **not aware of the service facility** available in Redmimobile phone **(58.4%)**.
- Majority of the respondents say that Redmi

phone has good **battery backup (75.2%)**.

- Majority of the respondents prefer **6 GB RAM (37.6%)**.
- Majority of the respondents have purchased Redmi from **mobile showroom (38.4%)**.
- Majority of the respondents are not satisfied with the quality for the **fixed price (50.4%)**.
- Majority of the respondents like **storage feature** in Redmi mobile **(38.4%)**.
- Majority of the respondents opinion regarding **price is medium (41.6%)**.
- Majority of the respondents have opted **EMI** as mode of payment **(37.6%)**.
- Majority of the respondents have scored Redmi phone **4 out of 5 (32.8%)**.
- Majority of the respondents are not aware of **any other person using Redmi (40.8%)**.
- Majority of the respondents prefer **black colour (37.6%)**.
- Majority of the respondents decision factor was **low price (37.6%)**.

CHI SQUARE ANALYSIS

- There is **no significant relationship** between the age and the factor of attraction



towards Redmi.

- There is **no significant relationship** between the Occupation and Preference of Redmi Mobile.

RANK ANALYSIS

- Majority of the respondents consider **battery capacity** as the primary level of their satisfaction towards Redmi mobile phone.

SUGGESTIONS

- Improvement in Quality of Product
- Heating issues can be solved
- Increase in Storage Capacity
- Usage of Snapdragon processor
- Increase Battery Backup

CONCLUSION

Redmi phone had been emerged as a most popular mobile brand in India after the 2015, since most the people liked the brand for its compatibility and usage of the product. It had gathered a huge market in mid range mobile to high end module, most of popular brand mobile phones lost their market for its brand name but redmi reminded the same in order to retain their loyal customers and capture a large number of new people day by day and grown dramatically over the past years. Finally I conclude from this study of user interface of the mobile phone and sales after service is most favour part in the redmi mobile.

BIBLIOGRAPHY

1. <https://en.wikipedia.org/wiki/Redmi>
2. www.google.com
3. www.indianmarket.com
4. http://shodh.inflibnet.ac.in/bitstream/123456789/455/4/04_literature%20review.pdf
5. www.allprojectreports.com/...Projects/Marketing-project



A STUDY OF CUSTOMER SATISFACTION IN POST OFFICE SAVING SCHEMES WITH SPECIAL REFERENCE IN COIMBATORE CITY

***Mr. Naveen. M, **Mr. D. Shanmugavadivel**

**Student of III B.com, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM104, Kalapatti Road, Coimbatore- 641 048*

***Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM104, Kalapatti Road, Coimbatore- 641 048*

ABSTRACT

Post office service is the backbone of our country's communication and it plays an important role for the economic growth. Investment is one of the major issues of rural working women as their small savings of today are to meet the expenses of tomorrow. Rural and urban peoples have a greater tendency to save and invest because of their independent earning power. They are also motivated by the investment behavior of their colleagues in their work place. The present study has been undertaken to analyze the whether the postal saving schemes have gained importance among the rural and urban people investors and it aims at bringing the urban and rural people attitude towards Post Office Saving Schemes with special reference in Coimbatore district.

KEYWORDS: *Customer preference, Importance of saving scheme, Savings and Investments*

INTRODUCTION

Savings and investment are key requirements for growth and development of an economy. However, lack of savings and investments are common in developing countries. The issue of low levels of domestic savings is a major problem in developing economy because of high unemployment, low wages, engagement of a large proportion of the population in the informal sector and poor performance of the economy. The interaction between savings and investment has become a subject of great interest and debate among macroeconomists.

STATEMENT OF THE PROBLEM

Post Office Saving Schemes are the one among the many savings plans available for the people. To tap money from public, there is a severe competition among banks. India is a country of villages; hence the people are unable to be aware of the

Post Office Saving Schemes. The depositors face a lot of difficulties while depositing money and getting back their deposits.

Post offices offer various saving schemes like Savings Bank Account, National Savings Certificate Account, Post Office Monthly Income Scheme, Senior Citizen Scheme, Recurring Deposit and so on. Banks also offer deposit schemes, but still Post Office Saving Schemes have gained significance in rural areas.

This study aims at bringing the attitude of depositors towards Post Office Saving Schemes and finding ways and means to solve if there are any problems. Hence, an exploratory study has been identified and the researcher has formulated the research problem as "A Study on Post Office Saving Schemes in Coimbatore District".

OBJECTIVES OF THE STUDY

THE FOLLOWING OBJECTIVES WERE DESIGNED FOR THIS STUDY.



1. To give an overview about post office.
2. To evaluate the performance of postal schemes.
3. To identify the attitude of depositors towards post office saving schemes.
4. To know the satisfaction of depositors towards postal schemes.
5. To suggest measures for the improvement of post office saving schemes on the basis of the findings of the study.

NEED OF THE STUDY

The Indian economy is growing significantly and has various investment options. But the government of India has provided the oldest investment option. Still the postal saving schemes have not gained much importance. The changing postal environment presents an enormous challenge for traditional postal business. It also creates a vast array of new business options and opportunities, as the interest rate compared to other schemes provided by the postal schemes are higher. The present study has been undertaken to analyze whether the postal saving schemes have gained importance among the investors or not. So this study helps to know the depositor's attitude towards post office saving schemes.

OPERATIONAL DEFINITION OF CONCEPTS

Savings:

A portion of income not spend on consumption of consumer goods, but accumulated or invested directly in capital equipment or in paying a home mortgage or indirectly through purchase of securities.

Post Office:

Post office is a place where mail is handled and where postage stamps, other materials are sold and services are provided.

Depositors:

Depositor is a person or a company that places a money in an account.

Interest Rate:

Interest rate is a rate which is charged or paid for the use of money. It is often expressed as an annual percentage of the principal. It is calculated by dividing the amount of interest by the amount of principal rates.

Service:

Service is the action of helping or doing a work for someone with or without benefit.

Schemes:

Schemes are defined as a large scale systematic plan or arrangement for attaining some particular object or putting a particular idea into effect.

Economy:

Economy is the state or country or region in terms of the production and consumption of goods and services and the supply of money.

Satisfaction:

Satisfaction is a fulfillment of one's wishes, expectations or needs or the pleasure derived from this.

Investment:

Investment is the act of investing money or capital in order to gain profitable return as interest, income or appreciation in value.

METHODOLOGY

This study is mainly empirical in nature based on primary and secondary data.

Collection of Data:

The primary data were collected with the help of questionnaire. It was consulted with the research Supervisor, research experts, the employees of post office and with experienced agents. Then the rough draft of the questionnaire was prepared. After considering the suggestions given by the supervisor, research experts and employees of post office, the questionnaire was revised and the final draft was prepared. This draft was pre-tested with 30 depositors. The purpose of the pilot study was to test the quality of questions and to confirm the feasibility of the study. After that the suggestions from the pre-test were taken into account, the restructured questionnaire was prepared and used for collecting primary data.

Secondary data were collected from various books, journals, published and unpublished documents. A number of discussions were held with the employees of postal departments and knowledgeable persons in the field.

TOOLS USED FOR ANALYSIS

- ❖ PERCENTAGE ANALYSIS
- ❖ RANK ANALYSIS
- ❖ WEIGHTED AVERAGE ANALYSIS

LIMITATIONS

1. This study is confined to the post office saving schemes only.
2. The sample of this study has been restricted to 135 persons among the depositors in Coimbatore district.



3. This study is purely based on the information supplied by the respondents and post office employees.

4. The findings of the study are not applicable to any other area.

5. The secondary data for amount of deposit for postal schemes are available only for five schemes.

REVIEW OF LITERATURE

Ganapathi. R (2010), in his study, “Investors Attitude Towards Post Office Deposits Schemes” stated that most of the respondents have less

awareness about post office saving schemes. Hence, proper advertisements must be made for post office savings schemes.

Ravindran(2016), revealed that post office is not only medium of sending letters to the public. It gives multiple financial services to the public like send money to foreign country, postal life insurance, mutual fund investment and small saving schemes. He also suggested that to attract women investors by providing right information and knowledge about the post office savings schemes through advertisement.

SIMPLE PERCENTAGE ANALYSIS

UNDER WHICH SCHEME OF DEPOSITS DO YOU SAVE

PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
Post office saving scheme (SB)	70	51.9%
Post office recurring deposit (RD)	18	13.3%
Post office time deposit (TD)	11	8.1%
Sukanya samriddhi account (SSA)	10	7.4%
Senior citizen saving scheme (SCSS)	4	3%
Public provident fund (PPF)	5	3.7%
Monthly income scheme (MIS)	6	4.4%
Postal life insurance (PLI)	2	1.5%
Rural postal life insurance (RPLI)	6	4.4%
No	1	0.7%
All schemes	1	0.7%
No account in post office	1	0.7%
TOTAL	135	100

INTERPRETATION –

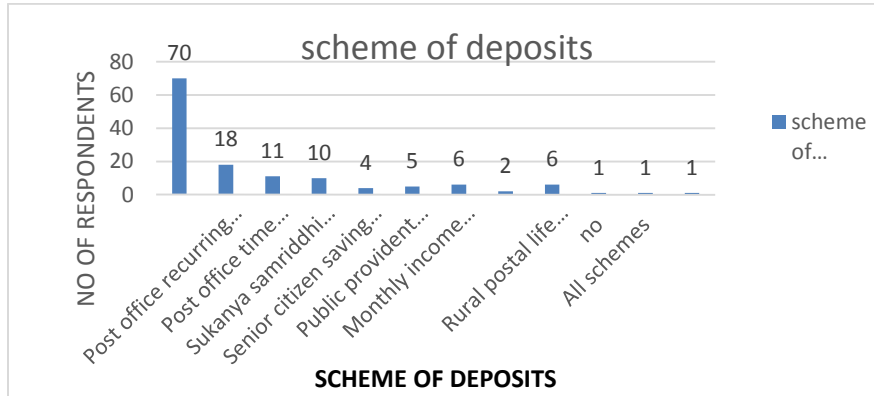
The above table shows that 51.9% of the respondents chooses post office saving scheme; 13.3% of the respondents chooses post office recurring deposit; 8.1% of the respondents chooses post office time deposit; 7.4% of the respondents chooses sukanya samriddhi account; 3% of the respondents chooses senior citizen saving scheme; 3.7% of the respondents chooses public

provident fund; 4.4% of the respondents chooses monthly income scheme; 0.7% of the respondents chooses no; 0.7% of the respondent chooses all schemes; 0.7% of the respondents chooses no account in post office.

Majority of the respondent chooses post office savings scheme (51.9%).



UNDER WHICH SCHEME OF DEPOSITS DO YOU SAVE



AVERAGE RANKING ANALYSIS

CHANGES LIKE TO OCCUR IN FUTURE IN THE POST OFFICE SAVINGS SCHEMES.

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	RANK
Schemes	76 380	26 104	21 63	9 18	3 3	135 568	I
Services	25 125	75 300	25 75	7 14	3 3	135 517	II
Employee approach	30 150	37 148	52 156	13 26	3 3	135 483	IV
High rate of interest	22 110	48 192	37 111	23 46	5 5	135 464	V
benefits	43 215	28 112	42 126	10 20	12 12	135 485	III

INTERPRETATION –

The above table shows the relation of changes to be occur in future in the post office savings schemes that are ranked based on the return of the respondents

The schemes are given as I rank; services are ranked as II; benefits are ranked as III; employee approach are ranked as IV; high rate of interest is rank.

WEIGHTED AVERAGE ANALYSIS

LEVEL OF SATISFACTION ON THE FOLLOWING ASPECT OF THE POST OFFICE SAVING SCHEME

FACTORS	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	MEAN SCORE
Procedure is easy to follow	69 345	42 168	19 57	1 2	4 4	135 576	4.266
Various scheme are available	27 135	76 304	26 78	4 8	2 2	135 527	3.903
Interest rate is high	45 225	33 132	52 156	4 8	1 1	135 522	3.866
At home	25	65	30	12	3	135	3.718



services is available	125	260	90	24	3	502	
Security is guaranteed	49	39	37	3	7	135	3.888
Reinvestment facility is available	245	156	111	6	7	525	
Agents services is good	24	68	29	12	2	135	3.740
	120	272	87	24	2	505	
	37	48	39	8	3	135	3.8
	185	192	117	16	3	513	

INTERPRETATION -

The above table justifies the satisfaction level on the aspects of the post office saving scheme. The highest mean score or average is 4.266 for the factor of satisfaction level of post office savings scheme.

FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- Majority of the respondents are female (52.6%).
- Majority of the respondents are 21 – 30 year group (53.3%).
- Majority of the respondents are from rural (40%).
- Majority of the respondents are from unmarried (76.3%).
- Majority of the respondents are from UG graduate (71.9%).
- Majority of the respondents are from private employee (31.1%).
- Majority of the respondents are from below 10000 (37%).
- Majority of the respondents are from nuclear family (63.7%).
- Majority of the respondents are between 4 – 6 members (63.2%).
- Majority of the respondents have 2 members (45.9%).
- Majority of the respondents are for no (75.6%).
- Majority of the respondents are from relatives (31.1%).
- Majority of the respondent chooses post office savings scheme (51.9%).
- Majority of the respondents chooses below 1 year (31.9%).
- Majority of the respondents chooses for safety of money (48.1%).

- Majority of the respondents chooses salary income (42.2%).
- Majority of the respondents are from invest in other investment options (31.9%).
- Majority of the respondents are no (69.6%).
- Majority of the respondents are for due to personal reason (33.8%).
- Majority of the respondents chooses yes (71.9%).
- Majority of the respondents are for safety (47.3%).
- Majority of the respondents are for giving priority to household spending and then saving (52.6%).
- Majority of the respondents chooses no (66.7%).
- Majority of the respondents chooses interest is low (49.2%).
- Majority of the respondents chooses yes (68.1%).

AVERAGE RANKING ANALYSIS

It is observed from the 1st ranking table in shows the relation of changes to be occurring in future in the post office savings schemes. Schemes ranked first, services ranked second benefits ranked third, employee approach ranked fourth, high rate of interest ranked fifth.

It is observed from the 2nd ranking table in attitude of depositors towards post office. Guarantee a secure and comfortable life ranked first, Give a guaranteed returns ranked second, Post office scheme creates awareness about saving among children ranked third Only the post office schemes are saving the rural people ranked four, Gives better returns when compared to other saving options ranked five, Post office should try to officers subsidiary services like bank ranked six, Less awareness among the public ranked seven, Every person should have an post office savings account ranked eight, Safest form of saving in



comparison with other investment pattern ranked nine, Rate of interest is low when compared with competitors ranked ten.

WEIGHTED AVERAGE ANALYSIS

It is concluded from the analysis that majority of the respondents are highly satisfaction the level of basic amenities available in post office is location.

It is concluded from the analysis that majority of the respondents are highly satisfaction Level on the following aspect of the post office saving scheme procedure is easy to follow.

CONCLUSION

The researcher hence strongly believes that the post offices is the only public organization which is more intimately bonded with human relations than any other government department. It is universally recognized as a facilitator of communications. Though there are many saving options available, as a public organization, the Department of Post should try to give innovative saving schemes to the public. The researcher concludes that India Post is all set to become strong and stronger, spreading a joyful light to people everywhere. It is bound to overcome all the hurdles presented by the new environment in the electronic age. Its doors are thrown wide open with customer delight in mind. It goes on with a noble mission of uniting humankind world over.

BIBLIOGRAPHY

1. *Geoffrey Clarke, (1984), The Post Office of India and its story, Calcutta.*
2. *Kothari. C. R, (2004), Research Methodology- Methods and Techniques, New Age International Publishers, New Delhi.*
3. *Miami Bob, (2009), Sal Paradise in the Post Office.*

Journals

1. *Anand. M. B, DR Srinivas D. L, DR H. H. Ramesh, (2013), Performances of Indian Postal Services, Innovare journal of Business Management, Vol 1, issue 2.*
2. *Kalavathy.S, "A Study on the Savings and Investment Behaviour of Salaried Person", Ph.D Thesis Submitted to Bharathiar University, Coimbatore, 2009.*

LINKS

1. www.google.com
2. www.indiapost.nic.in
3. www.indiapost.gov.in
4. <https://en.wikipedia.org/wiki/indiapost>
5. www.ippbonline.com
6. <http://www.postallifeinsurance.gov.in>



TO STUDY ON CUSTOMER SATISFACTION OF BIG BAZAAR ONLINE SHOPPING

***Mr. Ukesh Rahul S, **Mr. K.Ponnumani**

**Student of III B.com, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM117, Kalapatti Road, Coimbatore- 641 048*

***Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM117, Kalapatti Road, Coimbatore- 641 048*

ABSTRACT

Big bazaar is chain of hyper market in India Currently there are 210 stores across 80 cities and towns In India. Big Bazaar is design as an agglomeration of bazaars or Indian markets with clusters offering a wide range merchandise including fashion and apparels, food product, general merchandise, furniture, electronics,books,fast food and leisure and entertainment section. Big bazar is part of future group which also owns the central hypermarket. Big bazar was launched in september 2001 with the opening of its first four stores in Calcutta, Indore, Bangalore and Hyderabad in 22 days within a span of ten years there area now 150 big bazaar stores in 80 cities and town across India . Big bazar was started by Kishore biyani, the group CEO though Big Bazar was launched as a fashion formal including apparel cosmetics accessory s and general merchandise over the year big bazar has include a wide range of product and service offerings under their retail chain.

KEYWORDS: *Big bazaar , Hyper market , Range Merchandise*

INTRODUCTION

Customer's taste and preferences are changing day by day identification of these change is a major factor because the success of a firm depends of the ability of the firm to adjust with the attitudes of the customers. Customer satisfaction is an ambiguous and abstract concept and the actual manifestations of the state of satisfaction will vary form person to person .The state of satisfaction depends on a number of both psychological and physical variable which correlate with satisfaction behavior such as returns and recommend rate. Essentially customer satisfaction is the extent to which customer are happy with service and product provided by a business. It is an important concept in business because happy customer those most

likely to place repeat order and explore the full range of product / service offered.

STATEMENT OF PROBLEM

In this competitive world lot of multi level marketing companies are there in market and they have variety of product and service line up as well some of them are going successful and few of them are not doing well. This work is an attempt to study about Big Bazaar which is a really successful branch of future group. But some of the people are unsatisfied with navigation problems in Big Bazaar.

OBJECTIVES OF THE STUDY

- To find out attribute customer choose a retail



outlet like big bazaar

- To find out level of satisfaction from big bazaar based on various parameter.
- To analyze how the mix influence the customer satisfaction level.
- To find out the buying behavior of the customers coming in to Big Bazaar.
- To identify main competitors of Big Bazaar with regard to services.

SCOPE OF STUDY

- The success and failure of a company is purely based on customer's satisfaction. Globalization and liberalization had opened up high competition among the business sector.
- In order to retain the customers and also to attract the new customer. It is through adviser that the customer satisfaction and customer retention. Therefore there arise the need for big bazaar to find out the customer satisfaction.

RESEARCH METHODOLOGY

Research methodology is the way to evaluate the research problem scientifically. Primary data: It is collected through questionnaire.

Secondary data: collected from journals, books and websites.

TOOLS USED IN THE STUDY

The data collected by the respondents are first classified into two things like in tabular and inference. Further, the following specific tools were used,

- Simple percentage
- Chi – square
- Ranking

LIMITATION OF THE STUDY

- The study does not be able to cover the abnormal factor which are likely to influence the satisfaction of the customer..
- The study is only for the big bazaar confined to a particular location and a verysmall sample of respondents. Hence the findings cannot be treated as representative of the entire retail industry.
- Respondents may give biased answers for the required data. Some of the respondents did not like to respond.

REVIEW OF LITERATURE

- ❖ Simranjit Singh, Sonia Bajwa (2017) had carried out a research study on “buying behaviour of consumer towards counterfeit products: a case study of moga city”. The main objective of the research was to put emphasis on the reasons for counterfeit purchase and the norms they follow while forming this behaviour. The other objectives were to find out the dominant factors affecting on the consumer while purchasing counterfeit goods, to know the relationship of these factors with the purchase behaviour and application of TPB model for knowing the factors creating inclination towards counterfeit. The sample size was for research was 100 respondents. A structures questionnaire was used by following the convenience sampling method
- ❖ Priyanka Sharma (2017) performed a research study on “Consumer Behaviour towards Online Shopping-An Empirical Study With Reference To Bhiwani City, Haryana”. The main objective of the research was to identify the relationship of demographic factors that influence online shopping, to study the preferences of the consumers toward online shopping and the satisfaction level of the consumers while they shop online. To achieve the objective, null hypothesis „Online shopping is not reliable and trustworthy to the consumers” was tested. The sample size of the research was 100 respondents from Bhiwani City in Haryana state. The author had used Excel and Statistical Package for the Social Sciences (SPSS) software for data analysis purpose. After the data analysis and interpretation, the author concludes that the internet has given rise to great potential for businesses through connecting globally.

DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation of the study is based on the informationsupplied by a sample of 125 respondents.

- Simple percentage analysis
- Chi-square analysis
- Ranking analysis



SIMPLE PERCENTAGE ANALYSIS

Frequently you visit big bazaar to the respondent

Particular	No of respondent	Percentage
Occasionally	16	12.8
Once in a week	48	38.4
Once in a month	34	27.2
As and when required	27	21.6
Total	125	100

Interpretation

The above table shows that 38.4 % of the respondent's are once in a week and 27.2 % of the respondents are once in a month and 21.6 of the

respondent are in a as and when required .

Majority of the respondent once in a week (38.4 %)

Feel secure when online shopping in big bazaar

Particular	No of respondent	Percentage
Yes	62	49.6
No	63	50.4
Total	125	100

Interpretation

The above table shows that 49.6 % are respondent to the secure when online shopping and 50.4 % are respondent to the not secure when online

shopping.

Majority of the respondent not secure when online shopping (50.4 %).

Payments prefer in online shopping big bazaar

Particular	No of respondent	Percentage
Credit card	44	35.2
Debit card	54	43.2
Cash on delivery	27	21.6
Total	125	100

Interpretation

The above table shows that 35.2 % are respondent to the credit card ; 43.2 % are respondent to the debit card and 21.6 % are respondent to the cash on delivery.

CHI-SQUARE ANALYSIS

OCCUPATIONAL AND FREQUENCY OF VISIT HYPOTHESIS

There is no significant relationship between respondent's occupational and frequency of visit towards big bazaar.

OCCUPATION	FREQUENCY OF VISIT				TOTAL
	OCCASIONAL LY	ONCE IN A WEEK	ONCE IN A MONTH	AS AND WHEN REQUIRED	
PRIVATE EMPLOYEES	3	8	4	2	17
GOVERNMENT EMPLOYEES	7	17	13	10	47
SELF EMPLOYEE	3	12	11	8	34
PROFESSIONAL	3	11	6	7	27
TOTAL	16	48	34	27	125



FACTOR	CALCULATED VALUE	D. F	TABLEVALUE	REMARKS
OCCUPATION	3.192a	9	16.919	ACCEPTED

INTERPRETATION

The calculated value of chi-square is more than the table value. Hence, the hypothesis is accepted stating

that there is no significant relationship between the occupational and frequency of visit towards big bazaar.

**RANKING ANALYSIS
PROBLEMS FACED BY THE RESPONDENTS**

PROBLEM	1(5)	2(4)	3(3)	4(2)	5(1)	TOTAL	RANK
OFFERS	88	23	1	2	11	125	V
	10	60	105	117	124	416	
SERVICE	96	13	2	12	2	125	III
	47	101	60	118	123	449	
QUALITY OF PRODUCT	20	79	12	12	2	125	I
	120	140	112	113	4	489	
FACILITIES	37	34	20	18	16	125	IV
	185	136	60	36	16	433	
PRICE	88	24	2	10	1	125	II
	105	141	84	104	17	451	

INTERPRETATION

From this Ranking analysis, it is found that the people consider quality of product as the primary problem followed by service, facilities, price and finally offers.

Majority of the respondents consider quality of product as the primary problem in big bazaar.

FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- Majority of the respondents are **male (50.4%)**.
- Majority of the respondents belong to the age group of **21-30 years (38.4%)**.
- Majority of the respondent's education qualification is **under graduation (37.6%)**.
- Majority of the respondents are **income below 10000 (39.2%)**.
- Majority of the respondents are **self employed (37.6%)**.

- Majority of the respondents are **2-4members (42.4%)**.
- Majority of the respondents **family nature is joint (50.4%)**.
- Majority of the respondents **aware of promotion (58.4%)**.
- Majority of the respondents **once in a week(38.4%)**
- Majority of the respondents **strongly agree (45.7%)**.
- Majority of the respondents are **clothing (38.8%)**.
- Majority of the respondents problem in **online shopping (62.6%)**.
- Majority of the respondents to **save money (42.4%)**.
- Majority of the respondents to the **satisfied (41.6%)**.
- Majority of the respondents not secure when



online shopping (50.4%).

- Majority of the respondents are **browser and apps (40.0%)**.
- Majority of the respondents approach **social networking ads and post (42.6%)**
- Majority of the respondents **debit card (43.2%)**.
- Majority of the respondents **average (41.6%)**.
- Majority of the respondents **manual shopping (50.4%)**.
- Majority of the respondents **to gift (38.4%)**.
- Majority of the respondents by **maintaining quality (48%)**.

CHI – SQUARE ANALYSIS

- There is no significant relationship between respondent's monthly income and mode of payment towards big bazaar.
- There is no significant relationship between respondent's monthly income and mode of payment towards big bazaar.
- There is no significant relationship between respondent's educational qualification and their reason for e shopping in big bazaar.

RANKING ANALYSIS

- Majority of the respondents consider **quality of product as the primary problem in bigbazaar**.

SUGGESTIONS

- Faster replenishment of shelf during peak.
- Lighting near the grocery department must be right to enable the customer to carefully select the groceries.
- Flooring should be made innovative.
- Window display should be changed weekly or fortnightly to ensure freshness.
- Use symbols as direction.
- Use SINAGES for auto selling.

CONCLUSION

- There exist a healthy and positive relationship between employees and managers.
- The employees accept their responsibilities wholeheartedly, accept that it their responsibility to carry out a part of the activities of the company and they will be held accountable for the quality of their work.
- It is found that more than 60% of employees are of the age group of 20-35. From this it reveals that company is having young and energetic workforce who are very creative, enthusiastic and also very determined to grow in their career and in turn helping the company to grow.
- Working environment is good and also the various facilities provided helps in motivating the employees.



A REVIEW STUDY OF TRAFFIC SIGNAL VIOLATION DETECTION USING ARTIFICIAL INTELLIGENCE

¹Dantene Davis, ²Abhishek Singh, ³Amarjeeth Singh, ⁴Fahad Ahmad

^{1,2,3,4}B.E Students Department of CSE, RR Institute of Technology, Bengaluru, India

Article DOI: <https://doi.org/10.36713/epra7139>

DOI No: 10.36713/epra7139

ABSTRACT

In the new evolving world, traffic rule violations have become a central issue for majority of the developing countries. The numbers of vehicles are increasing rapidly as well as the numbers of traffic rule violations are increasing exponentially. Managing traffic rule violations has always been a tedious and compromising task. Even though the process of traffic management has become automated, it's a very challenging problem, due to the diversity of plate formats, different scales, rotations and non-uniform illumination conditions during image acquisition. The principal objective of this project is to control the traffic rule violations accurately and cost effectively. The proposed model includes an automated system which uses IR sensors and camera based on Raspberry PI to capture video. The project presents Automatic Number Plate Recognition (ANPR) techniques and other image manipulation techniques for plate localization and character recognition which makes it faster and easier to identify the number plates. After recognizing the vehicle number from number plate, the SMS based module is used to notify the vehicle owners about their traffic rule violation. An additional SMS is sent to Regional Transport Office (RTO) for tracking the report status.

KEYWORDS- *Automatic Number Plate Recognition (ANPR), Artificial Neural Network, Image acquisition, CNN, Tesseract OCR, Canny Edge Detection.*

I. INTRODUCTION

Automation in day to day life has gained importance in recent years. The number of accidents on the roads is due to the rule violations such as breaking traffic signals, over-speeding, driving on wrong sides etc. To avoid such traffic violations, traffic police has to be present on the road and has to continuously check if some vehicle is violating the rule. A certain automated solutions were developed to eliminate the violations; however each of them had certain limitations. For example, the video capturing cameras eliminated need of a authority to be present to check rule violation. However, whole stored video had to be checked manually for the rule violation scenario. In this proposed system, a solution for signal breaking violation is given .The system includes an automated system by using IR sensor, camera and number plate recognition application. In this system IR sensor will be placed near zebra crossing line. If any vehicle crosses the zebra line,

the desktop application will be initiated and will capture number plate image. Number plate recognition application by using image processing algorithm will recognize number plate and SMS will be sent to the offender in case of rule violation scenario.

Solid In all the countries there are driving rules available for people to drive carefully by being honest and respecting. When these rules are broken it is defined as a road violation. There road violations that happens in day to day traffic. For an example most common violations such as red light violation, over-speeding, overtaking other vehicles through double white lines and single white lines. These road protocols are applied thoroughly for the places where most of the accidents happen. Research team have implemented an OpenCV and python based system upon a PC . This system is implemented to ease the work to the police using a user interface. Image processing technology is used to detect the lanes,



vehicles and will identify vehicles who break rules. The team have implemented the system with the ultrasonic sensors in order to system to receive conditions to identify when a violation occur. It will be easier for the police to catch who break laws of the traffic and for the policemen who take bribes and dishonest people will also be reduced. An image of the violation with the location, time, date and an image of the vehicle to the nearest policemen devices by deriving devices around the current location that violation happened.

{This paper is structured as follows: Section II offers a thorough overview of the various violation systems introduced and algorithms used in various publications and research projects. Section III offers methodology, section IV offers experimental results and section V offers results. The conclusion and future work are presented in Section VI.}

II. RELATED WORK

The number of new vehicles on the road is increasing rapidly, which in turn causes highly congested roads and serving as a reason to break traffic rules by violating them. This leads to a high number of road accidents. Traffic violation detection systems using computer vision are a very efficient tool to reduce traffic violations by tracking and

Penalizing. The proposed system by Ruben J Franklin, Mohana was implemented using YOLOV3 object detection for traffic violation detections such as signal jump, vehicle speed, and the number of vehicles. Further, the system is optimized in terms of accuracy. Using the Region of interest and location of the vehicle in the duration of frames, determining signal jump. This implementation obtained an accuracy of 97.67% for vehicle count detection and an accuracy of 89.24% for speed violation detection. the proposed architecture of surveillance system with intelligent detection and tracking of multiple vehicles from the surveillance input video using YOLOv3 as an object detection algorithm. This is done through a neural network and an object detection model which are used in the classification of the moving objects into different respective classes, thus achieving vehicle classification. Next, from the same given video footage, traffic lights, zebra crossing, different lanes, and traffic signs are classified this comes under environment awareness. Combining these two, now violations are detected based on violations are then detected these can occur on the road which are signal jump, speed detection, and vehicle count. The main objective is to detect multiple vehicle violation detections and it gives a more detailed picture of concepts and technology involved in creating a traffic violation detection system using computer vision.

III. METHODOLOGY

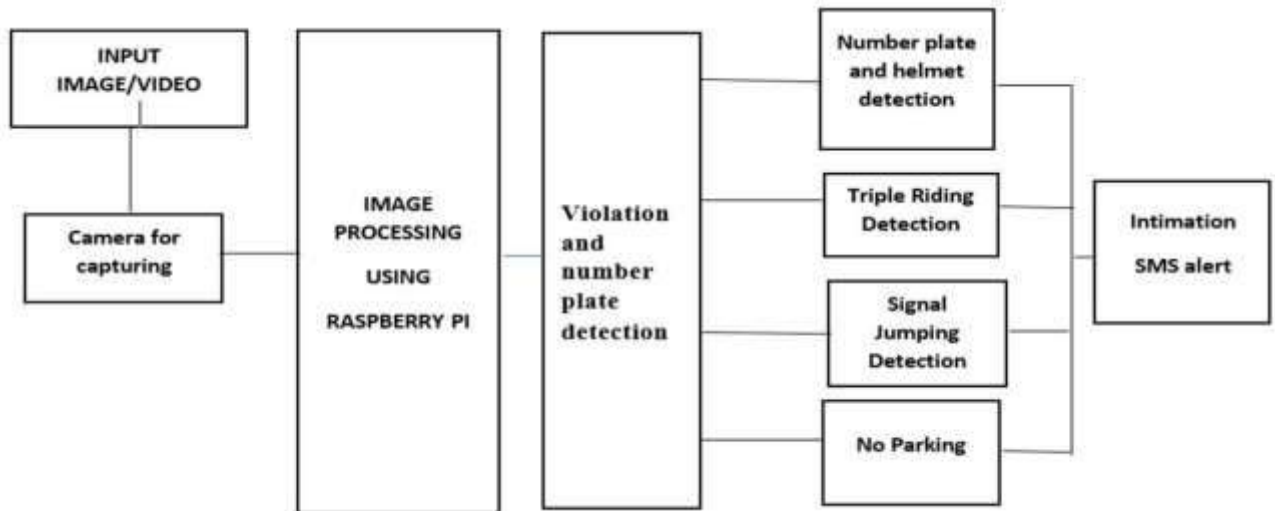


Fig 3.1 : System Architecture of Traffic Intrusion System

License plate recognition (LPR) is one form of ITS (Intelligent Transport System) technology that not only recognizes and counts the number of vehicles but also differentiates them. For some applications, such as electronic toll collection and red-light violation enforcement, LPR records license plates alphanumerically so the vehicle owner can be assessed the appropriate amount of fine. In others

cases, like commercial vehicle operations or secure-access control, a vehicle's license plate is compared against a database of acceptable ones to determine whether a truck can bypass a weigh station or a car can enter a gated community or parking lot. A license plate is the unique identification of a vehicle. The basic issues in real-time license plate recognition are the accuracy and the recognition speed. License Plate



Recognition (LPR) has been applied in numerous applications such as automatically identifying vehicles in parking lots, access control in a restricted area and detecting and verifying stolen vehicles. Quality of algorithms used in a license plate detector determines the speed and accuracy of the license plate detection. In the past, a number of techniques have been proposed for locating the plate through visual image processing.

A video is taken from a camera, and then each frame of the video is processed as the image. In this stage the license plate region from the given image is located and isolated. Quality of the image plays an important part hence prior to this stage pre-processing of the image is necessary. So first each frame pre-processed by binarization, noise reduction and edge detection. Then, the license plate is located by different image processing technique.

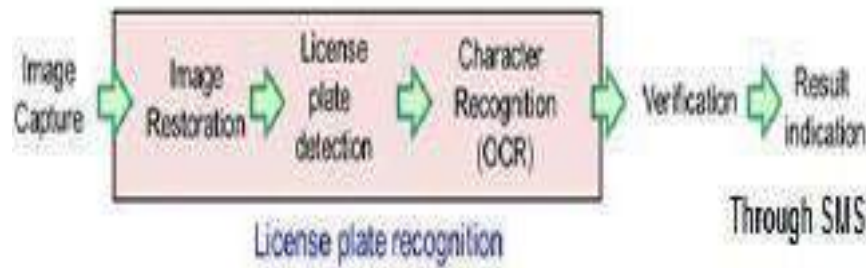


Fig 3.2 : Analysis Model of Traffic Intrusion System

Tesseract OCR: The number plate recognition using Tesseract OCR starts with image acquisition, then the image is being pre-processed to remove any distortions and noise from the image. Then number plate is then localized irrelevant part and characters

in the number plate are segmented and then the recognized and output. The license plate recognition detects number plates of all types of vehicles like car, truck and motorcycle. It also works on different number plate styles and fonts with high accuracy.



Fig 3.3 : Number Plate Detection using Tesseract OCR

Gaussian Blur method: Gray scaling and blurring: As the part of pre-processing the input frame got

from the CCTV footage, the image is Gray scaled and blurred with Gaussian Blur method.



Fig.3.4: Image Segmentation



Fig. 3.5: Gray Scaling

Canny Edge Detection: The canny edge detector is an multi stage algorithm is used to detect wide range of edges in image. Edge detection is the process of identifying the edge in a digital image where the

intensity of the image changes sharply or has discontinuities. The unwanted region is removed other than the number plate section.



Fig. 3.6: Canny Edge Image

CNN (Convolutional neural network) :The proposed architecture of surveillance system with intelligent detection and tracking of multiple vehicles from the surveillance input video .This is done

through CNN and an object detection model which are used in the classification of the moving objects into different respective classes, thus achieving vehicle classification.

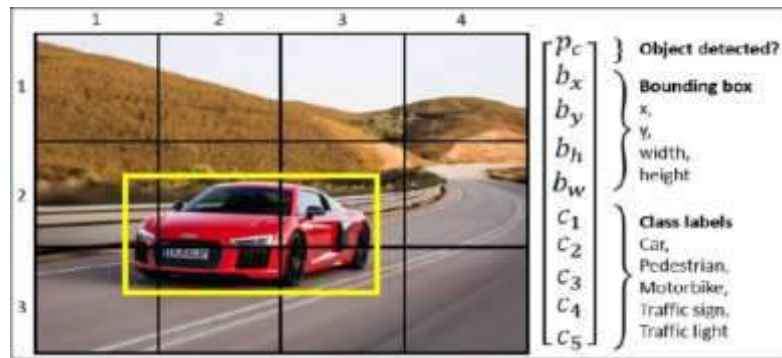


Fig. 3.7: Object Detection



IV. EXPERIMENTAL RESULT

MOTION DETECTION OPERATION: When there is motion, the differences of the profiles are larger than the case when there is no motion. The motion can be detected by selecting a threshold value.

VEHICLE DETECTION ALGORITHM: A vehicle detection operation is applied on the profile of the unprocessed image. The method used here is based on applying edge detector operators to a profile of the image edges are less sensitive to the variation of ambient lighting and are used in full frame applications (detection).

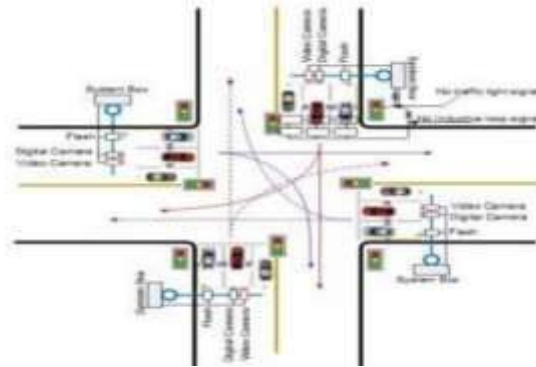


Fig. 4.1: An overview of a purely video processing

TRAFFIC MOVEMENTS AT JUNCTIONS (TMJ): The first step to measure the TMJ parameters using the key region method is to cover the boundary of the junction by a polygon in such a way that all the entry and exit paths of the junction cross the polygon. However, the polygon should not

cover the pedestrian marked lines. This step is shown in the figure given below. The second step of the algorithm is to define a minimum number of key regions inside the boundary of the polygon, covering the junction.



Fig. 4.2: Detection of a traffic violation output frame: bounding box and violation detection (signal jump)



Fig. 4.3: Speed Violation and Lane Change Detection

V. RESULT

Through this paper Number Plate of the vehicle is authenticated and data is taken. Since this model is capable of detecting vehicles in every frame it is having been enhanced to detect the speed of the vehicle in a video. Detection of vehicle crossing during a red light in the image and locate the exact location. Data of the vehicle is taken when the people riding on two-wheeler is more than two. Vehicle parked in the no parking area is given five minutes time to change the vehicle from the spot if not changed violation is detected and fine is sent through SMS. The speed is calculated using all the three principles, the rate of change of the object is the video frame by frame gives us the speed but it is not the true speed. This because the object in the video doesn't move linearly hence the area of the boundary frame by frame gives us the actual distance travelled by the vehicle in the video. The anchor points add more perception to the parameters. With this parameter, the speed of the vehicle is determined.

VI. CONCLUSION

Detections of traffic violation in the video surveillance is challenging as the number of vehicles on the road and traffic rules are depended on the different area of the road and timings. Here in this paper, the methods for traffic surveillance have been presented and the work on motion detection, license plate extraction and character recognition is carried out. Results show that the detection of multiple traffic violations from a single input source is archivable. It should be noted that robust motion detection is a critical task and its performance is affected by the presence of varying illumination, background motion, camouflage, shadow, and etc. The system has an accuracy of 97.67% for vehicle count detection and an accuracy of 89.24% to detect the vehicle speed. The detection time is lower for

high dense traffic flow. Thus, the system operation speed is dependent on the density of traffic.

REFERENCES

1. "Implementing Lane Departure Warning System on Raspberry Pi", University Tunku Abdul Rahman, May 2016
2. "A Real-Time Vision System for Night time Vehicle Detection and Traffic Surveillance", IEEE transactions on industrial electronics, Volume-58, No-5, May 2011.
3. "Morphological Image Processing Approach of Vehicle Detection for Real-Time Traffic Analysis", Science International Journal of Computer Science and Engineering, Volume-2, Issue-5, May 2014.
4. "Development of an automated Red Light Violation Detection System (RLVDS) for Indian vehicles", IEEE National Conference on Computing and Communication Systems, COCOSYS-09, CS11 [Accessed: 14-JULY-2016]
5. "Vehicle Detection under Day and Night Illumination", Proc. of ISCS-IIA99, May 2016.
6. "A real-time computer vision system for vehicle tracking and traffic surveillance", Transportation Research Part C 6, CA 94720-1776, USA, Dec 1998.
7. "Automated Driving Vehicle Using Image Processing", International Journal of Computer Science and Engineering, Volume-2, Issue-4, April 2014.
8. Handaric R. et al. "An Image Recognition Software Tool for Car Identification Based on License Plate", Transylvania University of Braşov Series I: Engineering Sciences, Volume-5 (54) No. 1, 2012.
9. "Object Detection in Image Processing Using Edge Detection Techniques", and IOSR Journal of Engineering, ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 04, Issue 03, March 2014 .
10. "Hybrid Parking Detection", United States Patent Application Publication, Patent No. - US20150117705A1, April 2015.



A STUDY ON CONSUMER SATISFACTION TOWARDS E-COMMERCE

***Ms. Gopika B, **Mr. K.Ponnumani**

**Student of III B.com, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM119, Kalapatti Road, Coimbatore- 641 048*

***Assistant Professor, Department of Commerce, Dr. N.G.P Arts and Science College (Autonomous)
- COM119, Kalapatti Road, Coimbatore- 641 048*

ABSTRACT

Internet has become an important medium for doing global business based on the state of the art technology. Global business was conducted in a new way: electronically, using networks and the Internet. The availability of Internet has led to the development of E-Commerce (Electronic commerce), in which business transactions take place via telecommunication networks. E-Commerce has two major aspects: economic and technological. The stress of this course will show you how to get started in the complex and exciting world of Electronic Commerce. New standards and new facilities are constantly emerging and their proper understanding is essential for the success of an operation and especially for those who are assigned a duty to select, establish, and maintain the necessary infrastructure. The main edge for business these days is e-trade. Full form of E-Commerce is Electronic Commerce. It implies managing in stock and administrations through the electronic media and web. On the web, it identifies with a site of the merchant, who offers item or administrations on to the customer from the gateway utilizing an advanced truck or computerized crate framework and licenses installment through MasterCard, Debit Card or other installment frameworks. E-Commerce includes carrying on a business with the help of the web. Basically, E-Commerce is that the development of business in web. In the past individuals used to purchase merchandise, for example, garments, gems, nourishment and so forth from outside. In any case, because of the development of E-business individuals are currently ready to purchase those things specifically from online sites with no bother. Presently, neighborhood business people to new companies, everybody is purchasing from online sites and sparing their time. Web has turned into the most utilized media for looking, exploration and now it is giving individuals a chance to purchase and offer things without being available before the merchant, customers/client. In this report, we will think about the investigation of E-Commerce in India. We will likewise see study results and discover the relationship between site qualities and consumer loyalty.

KEYWORDS: *E-com purchases, global business, marketing, technology development all over the world.*

INTRODUCTION

E-commerce (electronic commerce) is the activity of electronically buying or selling of products on online services or over the Internet. The term was coined and first employed by Dr Robert Jacobson, Principal Consultant to the California State Assembly's Utilities & Commerce Committee, in the title and text of California's Electronic Commerce Act, carried by the late

Committee Chairwoman Gwen Moore (D-L.A.) and enacted in 1984. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-commerce is in turn driven by the technological advances of the semiconductor industry, and is the



largest sector of the electronics industry. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services. There are three areas of e-commerce: online retailing, electronic markets, and online auctions. E-commerce is supported by electronic business.

OBJECTIVES OF THE STUDY

- To analysis the satisfaction level of consumer towards the e-commerce.
- To analysis the factors influencing online buying behavior of the consumer.
- To identify the problem in the e-com purchase.
- To analysis features that consumers expect in e-com purchase.
- To analysis the socio economic background of consumer.

RESEARCH METHODOLOGY

Research methodology is the way to evaluate the research problem scientifically. Primary data: It is collected through questionnaire.

Secondary data: collected from journals, books and websites.

TOOLS USED IN THE STUDY

The data collected by the respondents are first classified into two things like in tabular and inference. Further, the following specific tools were used,

- Simple percentage
- Chi – square

LIMITATION OF THE STUDY

1. The data was collected from the respondents of Coimbatore district. So that findings may not consider for other district.
2. The information can be based due to the questionnaire. Time and cost factors which have limited the size of samplings as 125.

REVIEW OF LITERATURE

According to (Melao, 2008), the clear commonalities among these definitions, include the improvement of business processes and the use of ICT in intranets, extranets and the Internet to conduct business. He defines e-Business as the use of ICT as an enabler to (re)design, manage, execute, improve and control business processes both within and between organizations. Thus, front and back-office integration and multi-channel integration become crucial in e-Business, which requires a challenging process improvement approach to support the necessary organizational, technological and social changes.

The article published by Rahmath Safeena, Hema Date and Abdullah Kammani in January 2001, states that, the various areas where the banks are preparing to use e- business approach include familiar and relatively mature electronically based products in developing markets, such as telephone banking, mobile banking, credit cards, ATMs, and direct deposit. This means that most of the banks have recognized the need to change their business process to conform to changing business trends in order to keep up with competition.

E-COMMERCE MEANING

In the era of economic liberalization and increased competition, Indian industry is attempting to harness technology to succeed in achieving its business objectives. In doing so, it has focused on balancing the benefits provided by new technologies with the associated risks in having one's business depend on it. This has resulted in a race to be the first to be second in implementing new technologies with most organizations waiting for their peers to explore new areas before venturing into them. The basic elements required for successful business engagement are changing rapidly. Pressures to economize, speed up operations, and supply superior service are constant. One of the most visible, challenging, exciting, and ill-understood means of responding to these pressures is the use of a number of electronic channels, particularly the Internet and its offshoots.



E-COMMERCE IN INDIA TODAY

Today E-commerce is a word in Indian society and it has become an integral part of our daily life. There are websites providing any number of goods and services. Then there are those, which provide a specific product along with its allied services.

POTENTIAL OF E-COMMERCE IN INDIA

Microsoft Research India was inaugurated in January 2005 in Bangalore, as the sixth MSR laboratory in the world. The arrival of a giant like Microsoft itself speaks of India’s potential as a world-player in the field of Information Technology and e-commerce; and others will soon follow. Indian researchers and technicians can further the fast emerging world of E-commerce in India and take it to greater heights.

SIMPLE PERCENTAGE ANALYSIS

AGE OF THE RESPONDENTS

AGE	NO OF THE RESPONDENTS	PERCENTAGE
BELOW 20 YEARS	49	39.2%
21 – 30 YEARS	58	46.4%
31 – 40 YEARS	14	11.2%
ABOVE 40 YEARS	4	3.2%
Total	125	100%

SOURCE: Primary data

INTERPRETATION

The above table that, 39.2% of the respondents are below 20 years, 46.4% of the respondents are from

DIFFERENT TYPES OF E-COMMERCE

- B2B - Business to Business
- B2C - Business to Consumer
- C2B - Consumer to Business
- B2E - Business to Employee
- C2C - Consumer to Consumer

DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation of the study is based on the informationsupplied by a sample of 125 respondents.

- Simple percentage analysis
- Chi-square analysis

21-30 years, 11.2% the respondents are from 31-40 years and 3.2% the respondents above 40 years.

PREFERENCES IN ONLINE SHOPPING

PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
VERY CONVENIENCE & TIME SAVING	37	29.6%
LOW PRICE	29	23.2%
CAN BUY RARE PRODUCTS	33	26.4%
OTHERS	26	20.8%
TOTAL	125	100%

SOURCE: Primary data

INTERPRETATION

The above table shows that 29.6% of the respondents choose because it’s very convenience & time saving; 23.2% of the respondents choose because of low price; 26.4% of the respondents choosebecause they can buy rare products and 20.8% of the respondents choose others.

CHI-SQUARE ANALYSIS

The chi-square test of independence can only compare categorical variables. It cannot make comparisons between continuous variables or between categorical and continuous variables. Additionally, the chi-square test of independence only assesses associations between categorical variables, and cannot provide any inference about causation.



TABLE: 1 - RELATIONSHIP BETWEEN AGE AND FREQUENCY OF E-COMPURCHASE

AGE	FREQUENCY OF E-COM PURCHASE				TOTAL
	WEEKLYONCE	MONTHLYONCE	3 MONTHONCE	RARELY	
BELOW 20YEARS	7	4	7	9	27
21 – 30 YEARS	10	16	16	6	48
31 – 40 YEARS	4	16	9	5	34
ABOVE 40YEARS	0	11	4	1	16
TOTAL	21	47	36	21	125

To find out the association between the age and frequency of e-com purchase of the respondents on price stability, chi square test is used and result is given below.

HYPOTHESIS

There is significant relationship between the respondent’s age and frequency of e-com purchase.

CHI – SQUARE TEST

FACTOR	CALCULATED VALUE	D. F	TABLE VALUE	REMARKS
AGE	20.537 ^a	9	16.92	ACCEPTED

INTERPRETATION

It’s clear from the above table show that, the calculated value of chi-square is more than the table

value. Hence, the hypothesis is accepted stating that there is significant relationship between the age and frequency of e-com purchase.

TABLE: 2 - MONTHLY INCOME AND PREFERENCE OF PURCHASE

MONTHLY INCOME	PREFERENCE OF PRUCHASE				TOTAL
	LOW PRICE	OFFER	VARIETY OF PRODUCTS	DISCOUNT	
BELOW 10000	6	10	19	8	17
10000 – 20000	7	15	17	5	47
20000 – 30000	2	8	12	3	34
ABOVE 30000	1	6	5	1	27
TOTAL	16	39	53	17	125

To find out the association between the respondents monthly income and their preference of purchase, chi-square test is used and given below.

HYPOTHESIS

There is no significant relationship between the respondent’s monthly income and preference of purchase.



CHI – SQUARE TEST

FACTOR	CALCULATED VALUE	D.F	TABLE VALUE	REMARKS
MONTHLY INCOME	4.763 ^a	9	16.92	REJECTED

INTERPRETATION

It's clear from the above table show that, the calculated value of chi-square is less than the table value. Hence, the hypothesis is rejected stating that there is no significant relationship between the monthly income and preference of purchase.

CHI – SQUARE ANALYSIS

- There is no significant relationship between respondent's age and frequency in e-com purchase.
- There is no significant relationship between respondent's monthly income and preference of purchase.

FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- Majority of the respondent's age belongs to 21-30 years (46.4%).
- Majority of the respondent's choose because it's very convenience and time saving (51.2%).

SUGGESTIONS

- Improve in the quality of the product.
- Display security badges.
- Make fast delivery.
- Use video demonstration.
- Accept all type of payment.

CONCLUSION

It has brought a massive change in our country and is changing the way businesses used to be. Every day new technology is brought and is also evolving. E-Commerce is the future of shopping and services. With the development of internet communication technologies, users of internet are growing in a massive way in India. In the next 5 to 10 years, Digital India surely will be established if this pace and progress of E-Commerce is maintained. India would also surpass various countries. Internet economy will grow day by day with the rapid expansion of internet. E-commerce plays a very important role in this era and it is introducing new methods. If these technologies and methods are accessible to large and small companies, the economy of India will boom. Government should take necessary steps to help the young entrepreneurs and provide internet even in the rural areas of India. We have seen clearly in this research that if websites have well attributes, customers are affected in a positive way. There are several factors and variables that need to be considered and decided upon when starting an e-commerce business. Some of these include: types of e-commerce, marketing strategies, and countless more. If the correct methods and practices are followed, a business will prosper in an e-commerce setting with much success and profitability.



COVID-19 AND THE FUTURE OF GIRL CHILD EDUCATION IN PANKSHIN AND ENVIRONS

Nokshuan, Emmanuel Jidauna¹, Polmi, Ibrahim², Shittu, A. Soliu³

¹*Department of Social Studies, School of Arts and Social Science, Federal College of Education Pankshin, Plateau State, Nigeria*

²*Department of Social Studies, School of Arts and Social Science, Federal College of Education Pankshin, Plateau State, Nigeria*

³*Department of Curriculum Studies, Federal College of Education Pankshin, Plateau State, Nigeria*

ABSTRACT

The study examined COVID -19 and the future of girl child Education in Pankshin and Environs. The study employed descriptive research design of a survey type. The population comprised the entire girl child in communities in Pankshin and environs. The sample sizes of 150 respondents were randomly selected using clustered random sampling techniques. Questionnaire was the instrument used to collect data for the study. The questionnaire was constructed on 4-point Likert scale of Strongly Agree (SA)-4, Agree (A)-3, Disagree (D)-2 and Strongly Disagree (SD)-1. The instrument was validated by experts from test and measurement in Psychology at the Federal college of Education Pankshin. The reliability of the instrument was established through Cronbach's alpha after the instrument had been administered on 20 girl child outside the sample for the study, which yielded reliability co-efficient of 0.71. The research questions raised were answered using the means scores. The study revealed that the pandemic have shattered education of the girl child through teenage pregnancies, taking parental responsibilities among others. The study revealed that many risk associated with sexual exploitation, gender base violence. It was concluded that COVID-19 affect the girl child education in communities in Pankshin and environs in Plateau State. Therefore, the study recommended that among others that; government should ensure the right of the girl child is protected, government and parents should ensure that the girl child should return to school.

KEYWORDS: COVID-19, Students, Parents, challenges, Education

INTRODUCTION

The spread of the coronavirus through the globe from China initially spared Nigeria, like many other Africa countries, with zero recorded case as at January 2020. By 28 February 2020, however, Nigeria reported their first case, a Nigerian UK returnee. According to UNESCO monitoring, over 130 countries have implemented nationwide closures, affecting over

80 percent of world's students' population. The coronavirus pandemic has exacerbated the situation, as many girls will never see the walls of a school let alone a schoolyard, their brilliant futures have been forever altered. Being a girl results in a marked proportion of children falling victim to human trafficking, child labour, child marriage and all manner of indescribable forms of exploitation at a disproportionately higher



level than their male counterparts these problems served as great obstacles to their education. Being a girl is more than a footnote on a calendar, because it requires a mindset shift, which eliminates all forms of discrimination, violence, exploitation, harassment and negative cultural and religious practices.

Coronavirus is also known as COVID-19, is a family of viruses that can cause respiratory illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in china. The virus is known as the Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) a pandemic Coronavirus Disease (COVID-19) outbreak, World health organization, (2019). COVID-19 is an infectious disease that causes respiratory illness with symptoms of cough, fever and in more severe cases, difficulty in breathing. This disease spread primarily through contact when an infected person either coughs or sneezes openly, when a person touches a surface or object and then touches the eyes, nose, or mouth. In addition, Arnold (2020) revealed that there is currently no standard vaccine cure for COVID-19, hence, the preventive measures against this virus includes frequent hand-washing for at least 20 seconds with soap and running water, or using alcohol based hand sanitizer, covering the nose and mouth with disposable tissue or flexed elbow when coughing or sneezing. Others were avoid touching the eyes, nose and mouth if hands are not clean and avoiding close physical contact (meter or 3 feet) also known as social distancing. The sick were encouraged to self-isolation to avoid infecting others.

Within the context of education, many scholars have defined girl child education in various ways. Offorma, (2009) defined girl-child as a biological female off rings from birth to 18 years of age. This period is made up of infancy, childhood, early and late adolescent state of development. The girl child is seen as a young female person, who would eventually grow into women and marry. She is conditional to look after the young ones the home and kitchen. In addition, Girl child education is a catch all term for a complexity of issues and debases surrounding education (primary education, secondary education, tertiary education and health education for females (Okernmor, 2012). Girl child education also includes areas of gender equality, access to education and its connections to the alleviation of poverty, good governance, which are major ingredients in averting crime against women. Today's girl child education is

for tomorrows living. Silvia (2020) defined women education as the education that would make a woman become aware of herself and her capacity to exploit her environment, and involves training in literacy and vocational skills to enable her become functional in the society. From the foregoing definitions, it could be inferred that Girl child education is very important.

Education is the key to personal development and the future of any society. It unlocks opportunities and narrow inequalities. It is the bedrock of informed, tolerant societies, and a primary driver of sustainable development. The COVID-19 pandemic has led to the largest disruptions of academic activities ever in Nigeria. Huisman and Smits (2020) in Emma gender crisis could exacerbate levels of girl child, early marriage, and forced marriage, as well as early pregnancy, which is already one of the top causes for girls dropping out of school in most developing countries after COVID-19. In addition, as was observed by Elston, (2017) in cases of Ebola outbreak the major issues with girl child were sexual and reproductive health aspects, where teenage girls dropped out of school due to an increased risk of gender related issues such as sexual exploitation, pregnancy, and (forced) marriage.

However, the outbreak of COVID-19 with schools closed throughout Nigeria, teenage pregnancies prevails, with increased in dropout rates girls become pregnant or married. Hall, et al. (2020) stress girls from the poorest communities where learning facilities were lacking the burden of care of the households often falls on most of the girls". One of the results was early marriages being fast-tracked. "Young girls were entering marriage to reduce the financial burden on their parents." In the study of Toyin, (2020) observed that gender equality could be reversed as the pandemic threatened to further entrench existing gender gaps in education. However, some parent and caregivers viewed educating a girl child is a waste of resources couple with the challenges of COVID-19, some parent even openly told their female children that, it is better for them to go and look for work to do or they should go and marry. Marginalized girls in poor homes are at a higher risk of dropping out of school compared to boys, which became a threat to their future education. In addition, Agnes (2020) observed that girls face a higher risk of violence and harmful practices during lock down. With schools closed, there were increased sexual and gender-based violence, early pregnancies, unsafe abortions and child marriages. In the study of Natalia, (2020) affirmed that girls were the first to be pulled out



of school because of the difficulties faced at homes such as the girls were put to work and care for younger siblings when families face economic hardship.

In view of Arnold, (2020), the loss of some family incomes could keep children out of school indefinitely, they have worked so many years to get kids in school, get them enrolled, and get them to stay in school. Parents who were already on the edge about sending their kids to school would not continue. They are literally starving and need monies a girl child can bring. In addition, many girls were at a high risk of never going back to schools, which is a huge concern for the future education of girl child. In the study of Dedeji, (2020) inequity in access to education, concentration in the informal labor market, inequitable burden of unpaid housework and care work lower women's economic productivity may drop out or may not have access to school next year due to the pandemic economic impact alone. These make girls more vulnerable to child marriage, and gender based violence all of which decrease their likelihood of continuing their education.

From another perspective, Frederickson (2020) indicated socio- economic aspects, where girls might spend less time studying or might drop out of school because of a disproportionate increase in unpaid household work. Girls between the ages of 5-14 years already spend forty percent more time doing household work than boys. As girls stay at home because of school closures, their household work burdens increased, resulting in girls spending more time helping at home instead of studying. This encouraged parents, particularly those between girls and boys.

Furthermore, Hal, et al. (2020) revealed that in the developing country most households put low value on the girl child education, they do that by keeping their daughters at home even after schools reopen at the post COVID-19 era. Moreover, girls risk dropping out of school when caregivers are missing from the households because they typically have to replace the work done by the missing caregivers, who might be away due to COVID-19 related challenge. Therefore, with the current COVID-19 pandemic, girls were require to render more work at home than boys it makes lagging behind with their studies, and some eventually dropped out of schools. In addition, Emma, (2020) posited that months of hard work convincing parents to send their girls to school can go to waste because of an economic shock that puts them back into extreme poverty. Following a crisis, girls' education is one of the first areas to suffer, in large part because of

the rise in poverty. For many households, lockdowns have seen incomes and savings disappear, meaning they will simply not be able to pay school fees.

The aftermath of the coronavirus on the girl child education in Pankshin and environs as early marriages have increase among vulnerable families, also some parents sees "bride price" received could help support the rest of the household and they will use part of the monies to settle the males' student school fees. That means most of the households from a disadvantage background have no alternative than taking girls out of the education system permanently. However, since the beginning of the lockdown, there have been an "alarming number of stories" of girls being sent early to their marital homes and "straight into domestic servitude and sexual abuse. COVID-19 has also altered brilliant future of many girls in Pankshin and environs making them become victims to violence, child marriage, child labour human trafficking and conflicts. Because of the long period of over stayed at home some girls got pregnant during lock down and most of these girls were from ages 19 - 22 especially parts of Bwarak, Tambes and some places like Kangvel and Kururuwa among others. They will no longer further their education because of pregnancies related cases, and becoming unexpected mothers.

The effects of COVID-19 on the Girl Child Education in pathetic in some of the areas there are risks of sexual harassment, exploitation, abuse and violence – both on the way to and at homes. Most of young girls looked at the period of the crises as means for them to be attending parties and clubbing, they do go to most of the clubs and joins examples every Sundays they were organizing parties at Catherine's Hotel at Nbot Tambes coming in numbers. Some of the consequences were early marriages because of unwanted pregnancies, some parents deliberately did not want to pay the girl child fees because moral values of most of the girls have were eroded to pathetic situations. In addition, many young girls who were trapped in their homes with partners that abuse them on all fronts were exposed to unwanted sex, adolescent pregnancy and sexual related activities that might not make them resume school when they reopen.

Purpose of the Study

The purpose of the study is to examine COVID-19 and the future girl child education in Pankshin and Environs. Specifically, the study examined;



1. ways in which COVID-19 affects education of the girl child
2. the extent to which hash economic condition of families occasioned by COVID-19 affects the future of the girl child education
3. measures to minimised the effects of COVID-19 on the girl child education

Research Questions

The following research questions were raised to guide the study.

1. What are the ways in which COVID-19 affects education of the girl child in Pankshin?
2. To what extend does families hash economic condition occasioned by COVID -19 affects the future of the girl child education?
3. What are the measures to minimise effects of the COVID-19 on the girl child education?

METHODOLOGY

The study employed descriptive research design of a survey type. The population of the study consists of the girl child in four communities within Pankshin and environs. The communities comprised of Tambes, Bwarak Kururuwa and Kangwel. Each of the

community was grouped as clustered. The sample sizes of 150 respondents were randomly selected using clustered random sampling techniques. Questionnaire was the instrument used to collect data for the study. The questionnaire consists of two sections; section “A” and section “B”. Section “A” obtained demographic data of the respondents such as gender, qualification, working experience etc. Section “B” sought information on COVID-19 and its effects on the education of Girl Child in Pankshin and environs. The questionnaire was constructed on 4-point Likert scale of Strongly Agree (SA) - 4, Agree (A)-3, Disagree (D)-2 and Strongly Disagree (SD) -1. The instrument was validated by two experts from test and measurement in Psychology at the Federal college of Education Pankshin. The reliability of the instrument was established through Cronbach’s alpha after the instrument had been administered on 20 girl child outside the sample for the study, which yielded reliability co-efficient of 0.71. The research questions raised were answered using mean scores. Any item with a mean score greater than or equal to 2.50 suggests Accepted, item with mean score below 2.50 suggests Rejected.

RESULTS

Descriptive Analysis

Research question 1: What are the ways in which COVID-19 affects education of the girl child?

Table 1: Mean Scores on ways in which COVID-19 affects education of the girl child

S/N	Statement	SA	A	D	SD	Mean	Decision
1	Premarital sexual relationships due to COVID-19	47	55	28	20	2.86	Accepted
2	Death tolls as a result of complication from abortions during COVID-19	60	43	24	23	2.93	Accepted
3	Increase in teenage pregnancies	55	35	30	30	2.77	Accepted
4	Domestic violence/traumatic experiences during corona pandemic	47	58	27	18	2.89	Accepted
Weighted mean						2.86	Accepted

The result in Table 1 revealed ways in which COVID-19 affects education of the girl child. The result showed that the mean values in the table are greater than 2.50 which indicated that majority of the respondents accepted with all statements in item 1-4. It showed that respondents accepted that; premarital sexual relationships due to COVID-19 affects education of a girl child 2.86, death tolls from of complications from abortions during to COVID-19 also affects education of a girl child 2.93, COVID-19

increase in teenage pregnancies 2.77, COVID-19 caused domestic violence/traumatic experience which affects education of the girl child 2.89. The weighted mean of 2.86 further justify the claim that all the items are ways in which COVID-19 affects education of the girl child

Research question 2: To what extend does families hash economic condition occasioned by COVID -19 affects the future of the girl child education



Table 2: Mean Scores on extend does families hash economic condition occasioned by COVID -19 affect the future of the girl child education

S/N	Statement	SA	A	D	SD	Mean	Decision
1	The experience lost of family income	41	55	29	20	2.71	Accepted
2	Face with burdens of caring for the younger ones	57	46	25	22	2.92	Accepted
3	Doing extra work to place food on the tables and to pay other bills	45	70	20	15	2.97	Accepted
4	Parent look at sending the girl child to schools as waste	48	57	28	17	2.91	Accepted
Weighted Mean						2.88	Accepted

The result in Table 2 showed the responses on extent to which families hash economic condition occasioned by COVID -19 affects the future of the girl child education. The result showed that the mean values in the table are greater than 2.50 which showed that majority of the respondents accepted with all statements in item 1-4. The result revealed that hash economic condition lead to; lost of family income 2.71, face with burdens of caring for the younger ones 2.92, doing extra work to place food on the tables and to pay

other bills 2.97, and parent look at sending the girl child to schools as waste 2.91. The weighted mean of 2.88 further justify the claim that families hash economic condition occasioned by COVID -19 affects the future of the girl child education in a high extent.

Research Question 3: What are the measures to minimize effects of the COVID-19 on the girl child education?

Table 3: Mean scores on measures to minimize effects of the COVID-19 on the girl child education

S/N	Statement	SA	A	D	SD	Mean	Decision
1	Governments must ensure education response plans are gender and age responsive and reflect the lived realities of girls	59	73	10	06	3.20	Accepted
2	The COVID 19 pandemic must not be used as an excuse to restrict or rollback girls and women’s access to essential sexual and reproductive health rights	80	45	15	10	3.30	Accepted
3	Governments should develop measures to identify and assist those who have not returned, for example by providing financial assistance programs	96	35	09	10	3.45	Accepted
4	Education planners should be aware of the particular threat that the corona virus - school closures pose on girls, and ensure that plans for learning should be a continuous process	91	40	13	06	3.44	Accepted
Weighted Mean						3.34	Accepted

The result in Table 3 showed the responses on measures to minimize the effect of COVID-19 on the girl child education. The result showed that the mean values in the table are greater than 2.50 which showed that majority of the respondents accepted with all statements in item 1-4. The part of the measures revealed includes; Governments must ensure education response plans are gender and age responsive and reflect the lived realities of girls 3.20, the COVID 19 pandemic must not be used as an excuse to restrict or rollback girls and women’s access to essential sexual and reproductive health rights 3.30, Governments

should develop measures to identify and assist those who have not returned, for example by providing financial assistance programs 3.45, and Education planners should be aware of the particular threat that the coronavirus and school closures pose on girls, and ensure that plans for learning should be a continuous process 3.44. The weighted mean of 3.34 further justify the claim that families hash economic condition occasioned by COVID -19 affects the future of the girl child education



DISCUSSION

The finding of the study revealed that some ways in which COVID-19 affects future of child education is through; achievement made towards the girl child education might be lost, vulnerability to physical and sexual abuse both by their peers and by older men, transactional sex as vulnerable girls and their families struggled to meet basic needs. It also affects their education because most parent will revert to early marriage for the girl child because gender inequality which is anchored in the work of Agnes (2020), as girls face a higher risk of violence and harmful practices. With schools closed, member organizations report increased sexual and gender-based violence, early pregnancies, unsafe abortions and child marriages. This comes just as support services including sexual and reproductive health and child protection programs – are reduced or under strain, limiting girls' ability to report what is happening to them. In addition, Huisman & Smits (2009) in Emma agrees that gender crisis could exacerbate levels of child, early, and forced marriage, as well as early pregnancy, which is already one of the top causes for girls dropping out of school in most developing countries after COVID-19. In addition, other reasons of COVID-19 affecting future education of girl child were: domestic violence were on the rise as girl child have no safe havens to return to, the girl child are particularly vulnerable, gender base violence can lead to injuries and serious physical, mental challenge and Sexual reproductive health challenge examples, STDs HIV, AIDs, and unplanned pregnancies.

The finding of the study also revealed that families hash economic condition occasioned by COVID-19 affects the future of the girl child education to include; the experience lost of family income, they were faced with burdens of caring for the younger ones. In addition, the girl child do extra work to place food on the table for the family and to pay other bills and Parent look at sending the girl child to schools as waste. The findings is related to the work of Frederickson (2020) which indicates socio- economic aspects, where girls might spend less time studying or might drop out of school at higher rates because of a disproportionate increase in unpaid household work. Girls already spend more time doing household work. As girls stay at home because of school closures, their household work burdens might increase, resulting in girls spending more time helping at home instead of studying. It was also supported by the work of Hall, et al. (2020) most households putting a lower value on

girls' education, to keep their daughters at home even after schools reopen. Moreover, the finding showed that girls risk dropping out of school when caregivers are missing from the household because they typically have to partly replace the work done by the missing caregiver, who might be away due to COVID-19-related work, illness, or death. Therefore, with the current COVID-19 pandemic, we might see more girls than boys helping at home, lagging behind with studying, and dropping out of school.

Furthermore, Emma (2020) also agreed that months of hard work convincing village elders and parents to send their girls to school can go to waste if an economic shock thrusts them back into extreme poverty. Girls' benefits entire societies, by losing all the gains the impact will be immeasurable. Following a crisis, girls' education is one of the first areas to suffer, in large part because of the rise in poverty. For many households, lockdowns have seen incomes and savings disappear, meaning they will simply not be able to pay school fees. Toyin, (2020) observes There are now fears that progress made concerning gender equality could be reversed as the pandemic threatens to further entrench existing gender gaps in education. However, some sees educating a girl child is a waste of resources couple with the challenges on ground as result of the COVID - 19, some of the parent even openly told their female children that better for them to go and look for work to do or they should go and marry. Marginalized girls in poor homes are at a higher risk of dropping out of school compared to boys which because a threat to their future education.

Finally, the finding of the study revealed the measures to minimize the effects COVID-19 on girl child education. These include: governments must ensure education response plans are gender and age responsive and it should reflect the lived realities of girls. Also, the COVID-19 pandemic must not be used as an excuse to restrict or rollback girls and women's access to essential sexual and reproductive health rights. Governments should develop measures to identify and assist those who have not returned, for example by providing financial assistance programs and education planners should be aware of the particular threat that the coronavirus - school closures pose on girls, and ensure that plans for learning should be a continuous process. This finding corroborates the finding of Silvia, (2020) who discovered that solutions Natalia, (2020).



CONCLUSION

Based on the finding of this study, it was concluded that COVID-19 affects girl child education in communities in Pankshin and environs. The COVID-19 crisis and which resulting to closure of schools increase the number of out-of-school children in Nigeria most especially the girl child. Most of them did not return to schools after the crisis because achievement made towards the girl child education might be lost, vulnerability to physical and sexual abuse both by their peers and by older men, transactional sex as vulnerable girls and their families struggled to cover basic needs among others. It also concluded that COVID-19 pushed some girl child to do extra work to place food on the table for the family and to pay other bills as well as it made some parents look at sending girl child to schools as waste.

RECOMMENDATIONS

The following recommendations were made:

- ✓ Governments must ensure education response plans are gender and age responsive and reflect the lived realities of girls, children throughout the life cycle of education.
- ✓ The COVID-19 pandemic must not be used as an excuse to restrict or rollback girls and women's access to essential sexual and reproductive health rights, which must continue to be prioritized, funded and recognized as lifesaving.
- ✓ The community should push and maintain essential services for adolescent girls and young women, such as sexual and productive health services.
- ✓ Girls' child should be encouraged to continue learning during and after the crisis and to support their peers.
- ✓ Government and development partners need to continue sharing experiences and best practices during and post the COVID-19 pandemic and reinforce the importance of girls and education nation building
- ✓ Government should identify and implement emergency financing measures to soften the impact of the economic downturn on education, health, and other vital public services.
- ✓ The girl-child should have it in mind from an early age that she can grow to become a respected person occupying a high position in the society and should learn to speak up and voice out right from an early age.

- ✓ Public awareness messages should always include specific information on risks that girls face as well as how to report abuse and seek help.

REFERENCES

1. Adedeji, A. (2020). *Ensuring learning continuity for every African child in the time of COVID 19*. Retrieved from <https://www.brookings.edu/blog/education-plus-development/2020/06/04/ensuring-learning-continuity-for-every-african-child-in-the-time-of-covid-19/>
2. Afforma, G (2009). *Girl child education in Africa: Keynote Address presented at the Conference of University WOMWNE of Africa Held in Lagos, 16th – 19th July*.
3. Agnes, O. (2020). *How girls' education and safety will be harmed by the COVID – 19 response* Published in: *African Arguments Action Aid Nigeria. Conference on the Social Protection of the Girl Child*, Retrieved from <https://www.hrw.org/news/2020/04/15/how-girls-education-and-safety-will-be-harmed-covid-response>
4. Arnold R. (2020). *Facing the challenges of COVID-19, Rotary clubs and partner organizations are finding new ways to support access to education*.
5. Elston, J, Cartwright, C, Ndumbi P, Wright J. (2017) *the health impact of the 2015 Ebola outbreak*. *Public Health*; 143: 60–70.
6. Emma Smith (2020). *many girls will not go back to school when lockdown is over*. Retrieved from <https://www.devex.com/news/many-girls-won-t-go-back-to-school-when-lock-down-is-over-97322>
7. Frederickson M. (2020). *COVID-19's gendered impact on academic productivity*. <https://github.com/drfreder/pandemic-pubbias> (accessed November 7, 2020).
8. Gbenga, A (2020). *International Day of the Girl-Child: COVID-19 has altered brilliant future of many girls, says Ama*.
9. Hall, K, Samari, G, & Garbers, S (2020). *Centering sexual and reproductive health and justice in the global COVID-19 response*. *Lancet*; 395: 1175–77 (Accessed November 7, 2020).
10. Huisman J, & Smits J. (2009). *Effects of household - and district-level factors on primary school enrollment in 30 developing countries*. *World Development*; 37: 179–93.
11. Natalia. K (2020). *Millions more cases of violence, child marriage, female genital mutilation, unintended pregnancy expected due to the COVID-19 pandemic*.
12. Okenmor, G, Ndit, J, & Filshok, M (2012). *The role of women education in conflict resolution and*



peace building in the present political dispensation in Nigeria: Journal of Women in Colleges of Education 16 (2) 71 – 77.

13. Silvia, P. Obaidur, R. & Maria, M. (2020). *Girls and young women in the era of COVID-19: An Urgent call for Action*
14. Toyin, O. (2020). *Nigeria: Making schools safe for girls – Day of the African Child. Retrived from <https://www.girlsnotbrides.org/articles/nigeria-making-schools-safe-girls-prevent-day-african-child/>*



5G SMART DIABETES: TOWARDS PERSONALIZED DIABETES DIAGNOSIS WITH HEALTHCARE BIG DATA CLOUDS

Sara khulaidi¹, Syed Muqet Ur Rahman Asim², Mohd Safi Uddin³.

**1*2*3 Affiliated to Osmania University, Information Technology, ISL engineering college, Hyderabad, Telangana, India.*

ABSTRACT

Due to the profound established and intentional damage suffered by polygenic disorder patients, it's essential to structure cheap methodologies for the peace of mind and treatment of polygenic disorder. In perspective on our expansive assessment, this text bunches those procedures into polygenic disorder one.0 and polygenic disorder two.0, that show insufficiencies regarding frameworks organization and data. we'll most likely structure a wise, monetarily perceptive, and sharp polygenic disorder assurance game arrange with redid treatment on these lines. During this article, we tend to initially propose the 5G sensible polygenic disorder system, which mixes the line headways, for example, wearable 2.0, AI, and tremendous information to form sweeping recognizing and examination for patients encountering polygenic disorder. By then we tend to gift {the information|the info|the information}-sharing half and redid the data examination model for 5G-Smart polygenic disorder. Finally, we tend to build a 5G-Smart polygenic disorder testbed that fuses clever article of clothing, itinerant, and Brobdingnagian information fogs. The take a look at outcomes exhibit that our system will effectively offer altered examination and treatment proposition to patients.

KEYWORDS: *Big Data, cloud storage*

1. INTRODUCTION

Polygenic disorder is an important steady upset from that much eight.5 p.c of the entire plenty suffer; 422 million individuals overall got to fight polygenic disorder. it's noteworthy to watch that kind two DM makes up around ninety p.c of the cases [1]. Even a lot of in an exceedingly general sense, things are going to be progressively deplorable, as reportable in [2], with increasingly kids and youth obtaining the chance to be helpless to polygenic disorder yet. because of the method that of polygenic disorder vast influences the general thriving and economy, it's squeeze to boost procedures for the expectation and treatment of polygenic disorder [3]. additionally, numerous segments will cause the contamination, for example, wrong and terrible life style, exposed inclination standing, obtainable the destroyed stress from society, we tend to initially propose a bleeding-edge polygenic disorder arrange

referred to as the 5G-Smart polygenic disorder structure, that directions novel advancements together with fifth time (5G) flexible frameworks, AI, useful tremendous information, individual to individual correspondence, splendid items of article of clothing [10], and so on. By then we tend to gift the information-sharing half and altered data assessment model for 5G-Smart polygenic disorder. Finally, considering the clever articles of article of clothing, PDA, and large information human administrations fogs, we tend to develop a 5G-Smart polygenic disorder testbed and provides the assessment results. Also, the "5G" in 5G-Smart polygenic disorder encompasses a two-cover which means. On one hand, it implies the 5G development which will be control onto because the correspondence system to acknowledge high bore and constant checking of the physiological states of patients with polygenic disorder and to provide



treatment organizations to such patients while not dominant their probability. On the opposite hand, "5G" implies going with "5 goals": price reasonability, pleasantness, personalization.

2. RELATED WORK

Identification of kind two polygenic disorder Risk Factors victimization Phenotypes Consisting of measurement and Triglycerides supported Machine learning [6] The hypertriglyceridemic area (HW) composition is unambiguously connected with kind two diabetes; be that because it might, until now, no investigation has evaluated the discerning intensity of phenotypes keen about individual mensuration estimations and lipid (TG) levels. The points of the current examination were to survey the connection between the HW composition and sort two polygenic disorder in Korean grown-ups and to assess the discerning intensity of various phenotypes comprising of mixes of individual mensuration estimations and TG levels. Between November 2006 and August 2013, 11937 subjects took Associate in Nursing interest during this review cross-sectional examination. we tend to quantified abstinence plasma aldohexose and TG levels and performed mensuration estimations. we tend to used parallel calculated relapse to appear at measurably noteworthy contrasts between typical subjects and people with kind two polygenic disorder utilizing HW and individual mensuration estimations. For increasingly dependable forecast results, 2 AI calculations, innocent Thomas Bayes (NB) and strategic relapse (LR) were used to assess the discerning intensity of various phenotypes. All expectation tests were performed utilizing a 10-overlay cross approval technique. Among the bulk of Vthe factors, the closeness of HW was most firmly connected with kind two polygenic disorder ($p < \text{zero}.001$, balanced OR = two.09 11.79-2.451 in ladies). once different midriff define (WC) and TG levels as elements of the HW composition, the connection between WC and sort two polygenic disorder was a lot of outstanding than the connection between TG and sort two polygenic disorder. The phenotypes would normally have higher discerning power in girls than in men. Among the phenotypes, the most effective indicators of kind two polygenic disorder were abdomen-to-hip proportion + TG in men (AUC by NB = zero.653, Autodefensas Unidas de Colombia by LR = zero.661) and rib-to-hip proportion + TG in girls (AUC by NB = zero.73, Autodefensas Unidas de Colombia by LR = zero.735). although the closeness of HW showed the foremost grounded relationship with kind two polygenic disorder, the discerning intensity of the

joined estimations of the \$64000 WC and TG qualities might not be the most effective method of foreseeing kind two polygenic disorder. Our discoveries might offer clinical information regarding the advancement of clinical alternative showing emotion supportive networks for the underlying screening of kind two polygenic disorder. massive Data-Driven Service Composition victimization Parallel Clustered improvement in Mobile setting. The enlargement of transportable registering, Associate in Nursing advanced cell advances with their sleuthing administration have caused an increasing variety of administrations from a horde of specialist co-ops. These versatile specialist organizations bolster numerous scopes of developing administrations with totally different quality measurements but comparative utility. To encourage a Robotized administration work method, it's needed to decide on and be a part of many administrations from the administration's pool within the fastest manner. transportable condition is encompassing and dynamic in nature that needs increasingly productive procedures to convey the mandatory help arrangement at once to the purchasers. it's a take a look at to decide on the best needed administrations within the least time from the varied arrangements of administrations with dynamic characteristics. This take a look at is attended during this work as a streamlining issue. A calculation is made by connexion molecule swarm improvement and k-implies bunching. It keeps running in parallel utilizing MapReduce within the Hadoop stage. By victimisation parallel making ready, the perfect help structure is noninheritable in basically less time, that is basic for taking care of huge live of heterogeneous info and administrations from completely different sources in moveable condition. The reasonableness of this projected methodology for bigdata driven facilitate organizations is approved through displaying and replica. moveable huge info is ending up ceaselessly predominant, because the range of cell phones and their value enclosed administrations is turning into extraordinarily fast. The moveable specialist co-ops furnish an enormous range of administrations with dynamic characteristics within the administration's pool, that should be ready exceptionally quickly. These administrations for creation are oftentimes cloud-based and large information-driven. it's seen that through utilizing a huge information-driven parallel programming model, the final calculation time for the administration creation method, will be attenuate basically up to associate degree adequate level. to the present finish, this paper displays a serious information-driven methodology (alluded to as PCPSO) to modify the administration



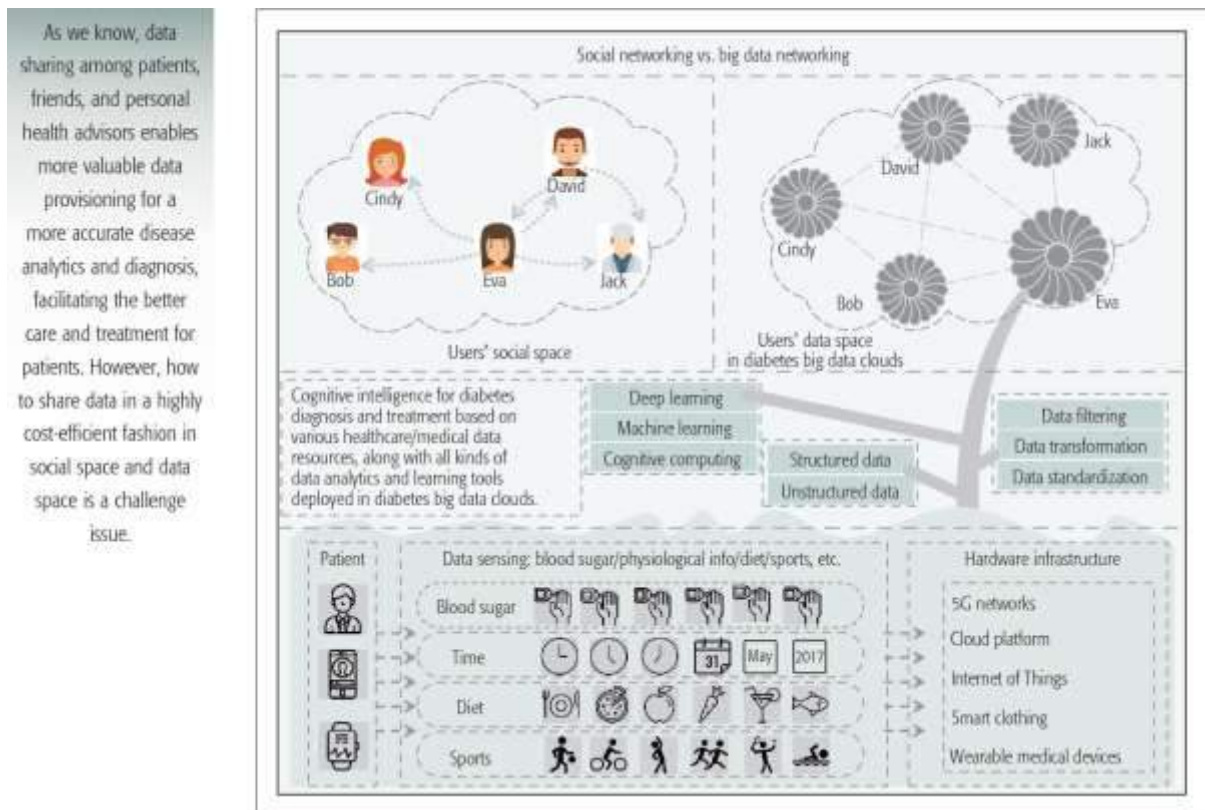
arrangement method in moveable conditions. PCSO calculation may be a mixture of PSO and k-implies grouping with MapReduce parallel making ready. As so much as we tend to might grasp, for administration piece in moveable condition, victimisation the joined capability of swarm insight, k-implies bunching, and MapReduce is one in every of the new and effective systems. it's shown that PCPSO is acceptable to urge the perfect structure is altogether attenuate time and suit the dynamicity, QoS, and quickly dynamical attributes of administrations in an exceedingly versatile domain. we've got displayed the exhibitions of PCPSO calculation and contrasted it and therefore the kPSO calculation in several measurements: eudaimonia versus calculation time, calculation time versus variety of emphases, calculation time versus the amount of administrations, and calculation time versus variety of parallel machines. it's seen that PCPSO beats the nonparallel kPSO as so much as calculation time. This correlation infers the necessity to be used of parallelization, i.e., the usage of huge

info devices to complete the administration structure method in an exceedingly satisfactory period of time.

3.FRAMEWORK

Contrasted with the inherent emergency clinic set highlights of polygenic disease one.0 and polygenic disease a pair of.0, 5G-Smart polygenic disease acknowledges triple-crown aversion and posthospitalization treatment of polygenic disease. Physiological observant is rarely once more unnatural to blood sugar location but incorporates alternative physiological markers. Viable measures ar taken to screen the truth and exercise of a consumer. thoroughgoing states of the consumer a checked in an exceedingly long run and economical vogue. The framework engineering of 5G-Smart polygenic disease seems in Fig. 1, which contains 3 layers: the police investigation layer, made-to-order finding layer, and knowledge sharing layer.

Fig.1: System Model



A testbed has been supposed to substantiate the credibleness of the 5G-Smart polygenic disease framework. In our testbed, we tend to utilize a blood sugar contraption to

collect individual regionally set blood sugar. The client's wellbeing-related info is gathered by a wearable a pair of.0 contraption (i.e., sensible apparel). The insights of consumer diet info and therefore the surge of



action info once the consumer is doing exercise within or outside will likewise be gathered utilizing the client's cellular phone on the off likelihood that the person wants it to be. we tend to conjointly structure a shrewd application to participate with a large vary of police investigation gadgets to grant useful administrations

to patients. Moreover, we tend to build up a cloud stage utilizing our server farm within the EPIC workplace. All the gathered info offload to the cloud stage through the interface of the sensible application. Also, the implications of the examination and medications are nourished back to the appliance.

Solution	Cost	Comfortability	Network support	Personalization	Sustainability	Scalability	Treatment pattern
Diabetes 1.0	High	Low	N/A	Low	Low	Low	Hospitalization, manual measurement, manual injection
Diabetes 2.0	Medium	Medium	Social network	High	Low	Low	Automata, and smart blood glucose sensing devices, contrasting analysis of drug effects, beta cell restoration, beta cell preservation
5G Smart Diabetes	Low	High	5G networks, social networks, big data networks	High	High	High	User-oriented data fusion, treatment intelligence via data analysis

Table 1. Comparisons of Diabetes 1.0, Diabetes 2.0, and 5G-Smart Diabetes.

Table.1: Comparison Table

Table one shows associate degree examination of the focal points and hindrances of polygenic disease one.0, Diabetes 2.0, and 5G-Smart polygenic disease. Seven highlights ar checked out, as well as price, comfort, organize support, personalization, flexibility, skillfulness, and treatment style. From Table one, we will see that 5GSmart polygenic disease is superior to polygenic disease a pair of. zero within the incidental to four viewpoints: 5G-Smart polygenic disease receives long-range informal communication administrations to acknowledge treatment direction of the patient by members of the family and companions. Ø Since the blood sugar record is said to physiological lists, 5GSmart polygenic disease uses physiological info, nourishment utilization info, and exercise info to make the proficiency and execution of the conclusion and treatment of polygenic disease.

4. EXPERIMENTAL RESULTS

In this paper, the author is describing the idea to diagnosing polygenic disease victimisation accessible lowcost technologies like 5Gnetwork where the smartphone will communicate with cloud server to store or retrieve knowledge, wearable devices which may sense the form glucose level and sent to the smartphone via Bluetooth and so the smartphone can send to a hospital cloud server for additional analysis. polygenic

disease diagnosing defines in a pair of levels: polygenic disease one.0: wherever a patient needs to move to the hospital for a medical exam, if polygenic disease detected then he needs to be admitted to the hospital for continuous watching which may be terribly polygenic disease a pair of.0: wherever patient no got to move to hospital and he simply needs to wear a detector which may keep informing patient concerning current polygenic disease level and therefore the patient can take necessary action supported knowledge given by detector. victimisation this device patients aren't needed to travel to hospital and may save hospital bill charges however this detector can't be afforded by all peoples as its basic worth is \$10000. to beat such a difficulty author is describing the 5G-Smart polygenic disease idea. Here 5G refers to 5 blessings provided by this paper one. Cost-effectiveness a pair of. Comfortability three. Personalization four. property five. Smartness To implement the on top of ideas I style a dummy cloud that ceaselessly receive knowledge from users. we tend to don't have any devices therefore I style a simulation application that generates random glucose for every user and report back to the cloud and so the cloud can predict whether or not the user has polygenic disease or not by running data processing algorithmic program.

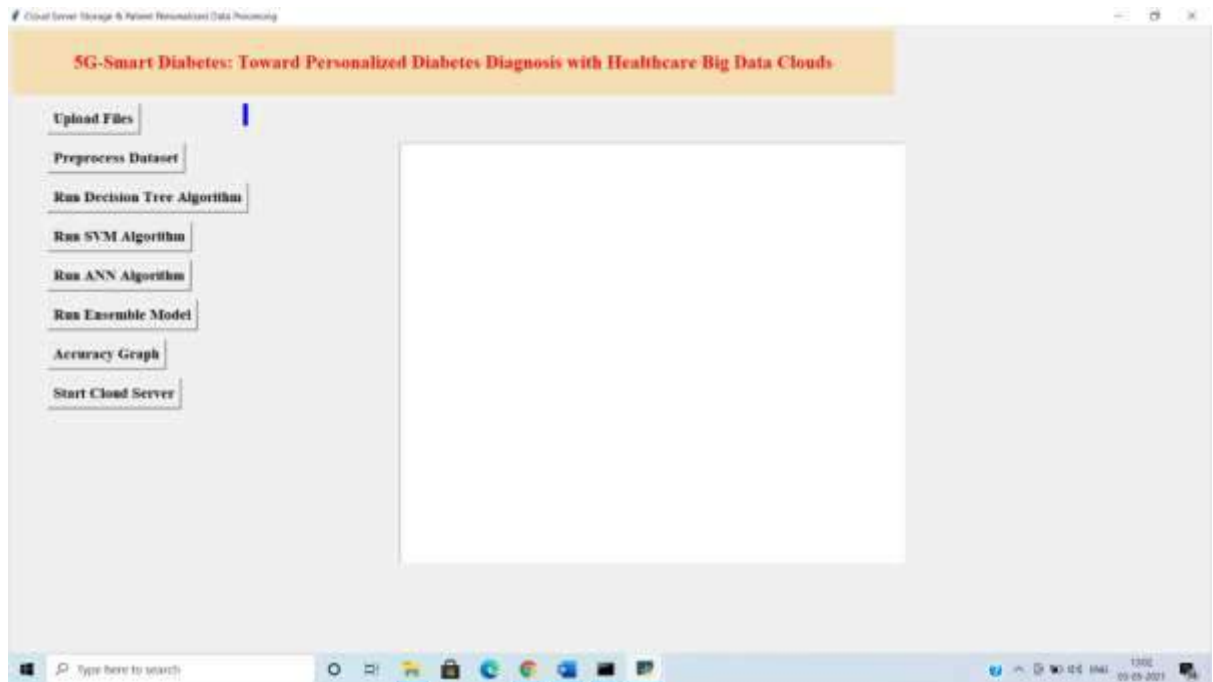


Fig.2: Cloud Server Screen

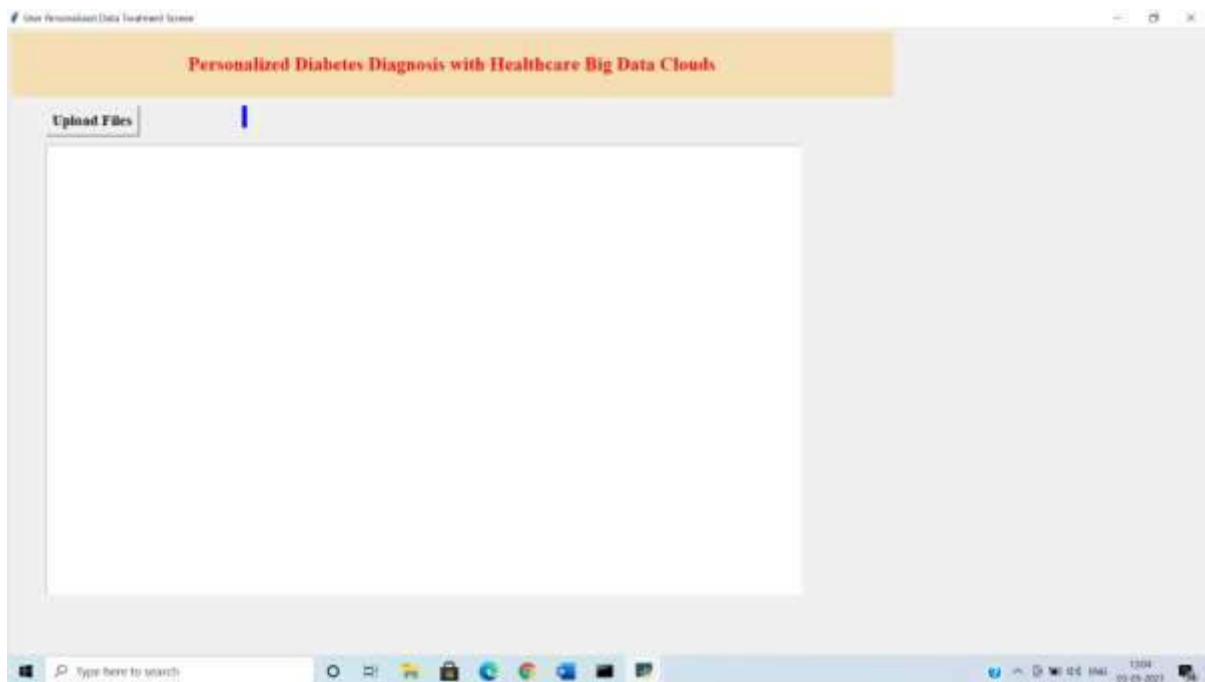


Fig 3 : User screen

5.CONCLUSION

In this article, we tend to initially propose a 5GSmart polygenic disease structure that joins a characteristic layer, associate degree altered finish layer, and a data-sharing layer. Appeared otherwise concerning polygenic

disease one.0 and polygenic disease a pair of.0, this method are able to do sufferable, viable, and understanding polygenic disease assurance.



6. REFERENCES

1. S. Mendis, "Global Status Report on Noncommunicable Diseases 2014," WHO, tech. rep.; <http://www.who.int/nmh/publications/ncdstatus-report-2014/en/>, accessed Jan. 2015.
2. F. Florencia et al., IDF Diabetes Atlas, 6th ed., Int'l. Diabetes Federation, tech. rep.; <http://www.diabetesatlas.org/>, accessed Jan. 2016.
3. M. Chen et al., "Disease Prediction by Machine Learning over Big Healthcare Data," *IEEE Access*, vol. 5, June 2017, pp. 8869--79.
4. O. Geman, I. Chiuchisan, and R. Todorean, "Application of Adaptive Neuro-Fuzzy Inference System for Diabetes Classification and prediction," *Proc. 6th IEEE Int'l. Conf. EHealth and Bioengineering, Sinaia, Romania, July 2017*, pp. 639--642.
5. S. Fong, et al. "Real-Time Decision Rules for Diabetes Therapy Management by Data Stream Mining," *IT Professional*, vol. 26, no. 99, June 2017, pp. 1--8.
6. B. Lee, J. Kim, "Identification of Type 2 Diabetes Risk Factors Using Phenotypes Consisting of Anthropometry and Triglycerides Based on Machine Learning," *IEEE J. Biomed. Health Info.*, vol. 20, no. 1, Jan. 2016, pp. 39--46.
7. M. Hossain, et al., "Big Data-Driven Service Composition Using Parallel Clustered Particle Swarm Optimization in Mobile Environment," *IEEE Trans. Serv. Comp.*, vol. 9, no. 5, Aug. 2016, pp. 806--17.
8. M. Hossain, "Cloud-Supported CyberPhysical Localization Framework for Patients Monitoring," *IEEE Sys. J.*, vol. 11, no. 1, Sept. 2017, pp. 118--27.
9. P. Pesi, et al., "An Advanced Bolus Calculator for Type 1 Diabetes: System Architecture and Usability Results," *IEEE J. Biomed. Health Info.*, vol. 20, no. 1, Jan. 2016, pp. 11--17.
10. M. Chen et al., "Wearable 2.0: Enable Human-Cloud Integration in Next Generation Healthcare System," *IEEE Commun. Mag.*, vol. 55, no. 1, Jan. 2017, pp. 54--61.



A STUDY ON OPINION OF PARENTS REGARDING THE IMPACT OF ADVERTISEMENT ON CHOCOLATE AMONG THEIR CHILDREN WITH SPECIAL REFERENCE TO COIMBATORE CITY

DRNGPASC 2020-21 COM 90

Swetha A¹, Mr. P. Vimal Kumar²

¹Student, Department of Commerce, Dr. NGP College of Arts and Science, Coimbatore-48

*²Assistant Professor, Department of Commerce, Dr. NGP College of Arts and Science,
Coimbatore-48*

ABSTRACT

This study is to find out the influence of TV advertising on children to their own evaluation of goods and services, selection and purchasing decision. The data has been collected from 120 parents by applying convenient sampling technique. Statistical tools such as percentage analysis, rank analysis, chi-square analysis and weighted score analysis have been used to analyze the data. The Study has attempted to find out, how children are influenced by the television advertisements. It was also found that advertisement creates materialism in children to convince their parents.

KEY WORDS: *Advertisements, Children, Buying behavior, Awareness.*

INTRODUCTION

Television is the most important contributor to human social behaviour; it is an important source of social influence. Advertising is the powerful medium in the present commercial society. The main objective of this study is to identify, how children are influenced by the television advertisements. Television pays the most important contributor to human social behaviour; it is an important source of social influence. Extensive research carried out by many researchers and it has been indicated that the television can and does influence children feelings, attitude and behaviour. Children today are exposed by the advertisements on the media like the television, print media and internet in which Television is the most influencing media among the children (Effect of Advertisements on Children). Children who watch excessive television are the ones who do not take participation in games and they are the consumers of fat and high energy snack foods. Commercials Ad's could be attributed as misleading. They do not on show that the foods children should eat to keep themselves healthier.

Recently there is a huge growth in media industry. The findings of this study show that children are affected by TV advertisements and the more they watch the more they are getting affected. They are highly influenced by peers. Children behaviour towards parents and pester power are also affected by their viewing of TV advertisements. Children do not have the ability to differentiate between reality and fiction. Children watch the television advertisement and insist their parents purchase the things they watched on television.

STATEMENT OF THE PROBLEM

To find out the influence of TV advertisement on children to their evaluation of goods and services on own, selection and purchasing decision.



- To find out whether children targeted advertisements influence the consumption patterns of children.
- To find out the impact of children targeted Television advertisements in the socializing process of Children.

OBJECTIVES OF THE STUDY

- To examine the impact of advertisement on buying behavior of children's parents.
- To find out that which factors have more impact on children buying behavior.
- To analyze the accessing variable of television advertising which are influencing parent's buying behavior.
- To Identify whether the advertising turns the children into Sales Promoter.
- To Identify the awareness of chemicals present in chocolates among the parents.
- To find out whether children targeted advertisements influence the consumption patterns and habits of children.

RESEARCH DESIGN

The research design is the pattern for the fulfillment of objectives. It is a master plan specifying the methods for collecting and analyzing needed information for the study.

DATA COLLECTION

The source of data is primary and secondary data sources.

PRIMARY DATA

A primary data is a data which is collected for first time for the particular interest to collect more information. In this study, the primary data was composed using questionnaire.

SECONDARY DATA

Secondary data consist of information that already exists and collected from the other sources. In this study, the secondary data was collected from studies, magazines, journals and websites.

SAMPLE DESIGN

Sample design is a plan that determine before the data is actually obtaining for a sample from the given population. The researcher should decide the way while the selecting sample for the study. Samples can be either probability samples or as the non-probability samples.

SAMPLE SIZE

The sample size selected for the study is 120 respondents.

LIMITATION OF THE STUDY

As my research is academic research, there is some limitations, because it is impossible to control all variables in the study. I only selected Coimbatore city households and there nearby rural and semi urban areas as my study population because it is easy to me to approach them. I only selected sample of 120 based on both male and female respondents.

TOOLS USED FOR THE STUDY

The collected data were analyzed and interpreted properly to find the results of the research work. Further, the following specific tools were used,

- Simple percentage analysis
- Ranking analysis
- Weighted average analysis
- Chi-square analysis



Simple Percentage Analysis

Simple Percentage Analysis is one of the basic statistical tools which is widely used in the analysis and interpretation of primary data. It deals with the number of respondents response to a particular question arrived from the total population selected for the study.

The Simple percentage is calculated by using the formulae,

$$\frac{\text{Actual Respondents}}{\text{Total number of respondents}} \times 100$$

**TABLE NO 1
WILLINGNESS FOR CARTOONS IN ADVERTISEMENTS**

S.NO	FACTOR	NO. OF.RESPONDENTS	PERCENTAGE
1	Yes	111	92.5
2	No	9	7.5
	TOTAL	120	100

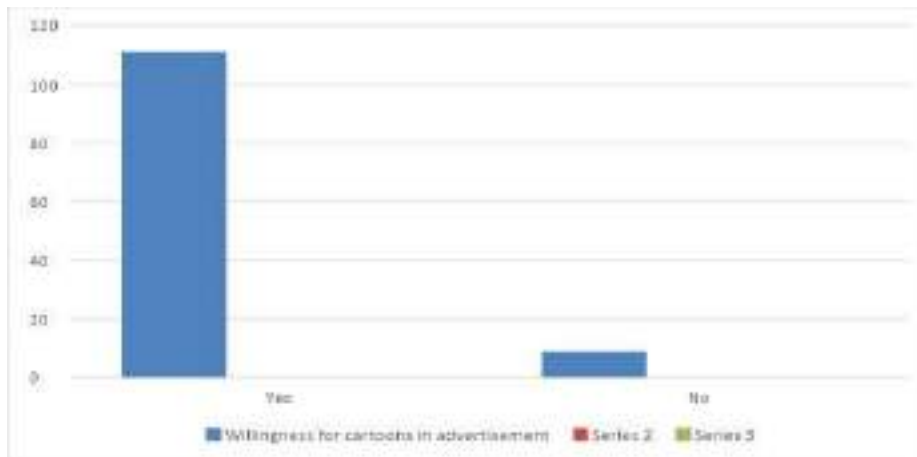
Source: Questionnaire

INTERPRETATION

In the above table, it shows the willingness for cartoons in advertisements 92.5% of the respondents says that the cartoon characters that appear on the advertisement make their willingness to buy the chocolates and 7.5% of the respondents says that the cartoon characters that appear on the advertisement does not make the willingness to buy the chocolates.

Majority 92.5% of the respondents says that the cartoon characters that appear on the advertisement make their willingness to buy the chocolates.

**CHART NO 1
WILLINGNESS FOR CARTOONS IN ADVERTISEMENTS**





RANKING ANALYSIS

Ranking analysis is the method where the respondents are asked to rank the choices.

It is the compare items to each other by placing them in order of preference.

In this study the respondents are asked to rank the various factors in their priority of their purchasing process are used to rank as 1,2,3,4 and 5. In this analysis item number one is the largest and five is the smallest.

The result of each questions of 135 respondents were totaled and the total result has been arrived. Final ranking has been based on the total result and their ranks are given in the following table

TABLE NO 2
FACTORS INFLUENCING PRIORITY TO PREFER PARTICULAR BRAND

FEATURES	1(5)	2(4)	3(3)	4(2)	5(1)	Total	Rank
Appearance	50	21	20	15	14	120	II
	250	84	60	30	14	438	
Colour	21	39	38	18	4	120	III
	105	156	114	36	4	415	
Brand	44	21	35	13	7	120	I
	220	84	105	26	7	442	
Quality	32	31	14	40	3	120	IV
	160	124	42	80	3	409	
Availability	28	13	16	16	47	120	V
	140	52	48	32	47	319	

INTERPRETATION

The above table shows the priority that the respondents make to prefer a particular brand.

Brand preference is given I by the respondents. Appearance is ranked II. Colour is ranked III. Quality is ranked IV.

Availability is ranked V respectively



WEIGHTED AVERAGE

**TABLE NO 3
TABLE SHOWING WEIGHTED AVERAGE ON FACTORS GIVEN IMPORTANCE**

Factors	1(4)	2(3)	3(2)	4(1)	TOTAL	MEAN SCORE
Taste/Flavour	80	27	11	2	120	3.54
	320	81	22	2	425	
Price	50	43	25	2	120	3.17
	200	129	50	2	381	
Quality	80	23	17	0	120	3.52
	320	69	34	0	423	
Brand	45	52	19	4	120	3.15
	180	156	38	4	378	
Quality	42	37	22	19	120	2.85
	168	111	44	19	342	

INTERPRETATION

The above table justifies the factors that are given importance while purchasing a chocolate. The highest mean score rise 3.54 is for the taste or flavor of the chocolate.

CHI-SQUARE ANALYSIS

A statistical test used to discover the probability of obtaining the observed by chance, under a specific hypothesis. Chi-square is a statistical significance test based on frequency of occurrence, it is applicable both qualitative and quantitative variables. A chi-square test is any statistical hypothesis test in which the test statistic chi-square distribution if the null hypothesis is true.

FORMULA

The statistics χ^2 defined by

$$\chi^2 = \sum (O-E)^2 / E$$

TABLE NO 4

AGE	OVERALL STATEMENT LEVEL OF RESPONDENTS				TOTAL
	DAILY	WEEKLY	MONTHLY	OCCASIONALLY	
Below 20,000	6	10	5	7	28
20,001- 30,000	8	14	13	3	38
30,001-40,000	2	12	13	3	30
More than 40,000	4	7	7	6	24
Total	20	43	38	19	120



HYPOTHESIS

To find out the association between monthly income of the respondents and the buying interval of the respondents, chi-square test is used and result is given below.

CHI-SQUARE TESTS

Chi-square test factor	Calculation value	Degree of freedom (df)	Table value	Result
Income	11.091 ^a	9	16.92	Rejected

INTERPRETATION

It is from the above that the calculated value of chi-square at 5% level is less than the table value. Hence the hypothesis is rejected. So there is no relationship between monthly income of the respondents and the buying interval of the respondents.

FINDINGS

SIMPLE PERCENTAGE

- Majority 57.5% of the respondents are female.
- Majority 41.66% of the respondents says taste influence their children.
- Majority 92.5% of the respondents says that the cartoon characters that appear on the advertisement make their willingness to buy the chocolates.
- Majority 96.7% of the respondents agrees that advertising of non-nutritious foods leads to childhood obesity.
- Majority 91.7% of the respondents says that the television advertisements directly affect children's eating habits and their food consumption.

RANKING ANALYSIS

- It is observed from the ranking table that brand preference ranked first and appearance is ranked second and colour is ranked third and quality is ranked fourth and availability is ranked fifth.

WEIGHTED AVERAGE

- The weighted average of the factors that are given importance while purchasing a chocolate. The highest mean score rise 3.54 is for the taste or flavor of the chocolate.

CHI-SQUARE ANALYSIS

In the chi-square analysis the calculated value of chi-square at 5% level is less than the table value. Hence the hypothesis is accepted. So there is no relationship between monthly income of the respondents and the buying interval of the respondents.

CONCLUSION

Now a days advertisers thinks that "selling to children is as easy as nailing a nail in soap". Small children can't even distinguish advertising from media content. Advertising fabricates an empty concept of happiness. Certain ads put a child's safety at risk.

The matter of reality vs fiction is one of the major concerns when dealing with advertisements aimed towards children. For advertises they should reach the maximum target market knowledge about the ability to tell reality from fiction is almost crucial.

Grievously, there are many stories about children that have got into accidents trying to imitate a super hero,



or extraordinary power demonstrated by actors or magicians in plays produced with special effects in ads. By mixing fantasy and reality, a child believes in what is said in the advertisement is true.

Excessive consumption of unhealthy food is the main cause of child obesity in the recent days. Worldwide 35% of the child population has obesity problems. A research conveys that, “Just 35 seconds are enough for a food brand to influence a child”. In advertising directed at children, 80% of unhealthy food.

SUGGESTIONS

- The government should take action to regulate and establish an authorized regulatory body to control TV advertising, specially aimed at children. certain restrictions should be enforced on air time of advertisements and also the maximum number of advertisements that can be aired for a certain hour in the television.
- It can be suggested that in order to decrease these risk factors, parents can organize the television watching time of their children in the early years;
- Parents should prevent their children from eating and drinking while watching television; and as an option for that food advertisements can be prohibited during the time when children are most likely watching television.
- The advertisements must be directed only to parents and guardians.

REFERENCES

1. *Thomas Robertson, Parental mediation of television advertising effects, Centre of media and children - (2004)*
2. *K.A.Coon and K.L.Tuker, television and children consumption patterns, (2002) human nutrition research centre.*



THE ECONOMIC IMPACT OF COVID-19 PANDEMIC ON THE TRAVEL AND TOURISM INDUSTRY: KERALA EVIDENCE

Siby K M¹, Dr.Varun V Varghese², Shiju C R³

¹Assistant Professor, Postgraduate Department of Economics, St.Paul's College Kalamassery

²Assistant Professor, Postgraduate Department of Commerce, St.Paul's College Kalamassery

³Assistant Professor, Postgraduate Department of Commerce, St.Paul's College Kalamassery

ABSTRACT

COVID-19 pandemic broke out when the travel and tourism industry was at its peak. There was a trend among the new generation spending more time and money on recreational activities as stress relievers. Travel and Tourism were prominent activities in this regard. The spread of the pandemic was so fast and gripping that the country itself got into complete lockdown and consequent shocks in every aspect of the economy. The study attempted to analyze the changes that occurred in the travel and tourism industry as a result of the pandemic. The study made use of statistical tools such as five-point Likert scale analysis, Wilcoxon Test, Chi-Square Test to analyze the impact of Covid-19 pandemic on the Travel and Tourism industry in Kerala. The study inferred from the analysis that lockdowns due to the Covid pandemic had significant and enduring negative impacts on the business prospects of stakeholders in the travel and tourism industry.

KEY WORDS: Travel and tourism industry, Covid Pandemic, Average occupancy rate, Average quarterly turnover

1. INTRODUCTION

The covid-19 pandemic and the consequent lockdowns had brought the social and economic life of the whole world to a standstill. WHO and World Bank in a joint report in 2019 forecasted a drastic decline in global GDP by 2.2 percent to 4.8 percent, to our greatest dismay which seemed to be materialized in the current period. (Chaudhary et al., 2020)

Travel and Tourism is one of the worst-hit industry by the outbreak of the Covid-19 pandemic. Before this unprecedented virus attack, Travel and Tourism were thriving in India. According to World Travel and Tourism Council, Tourism in India fetched the whopping US \$ 240 billion, constituting 9.2 percent of India's GDP in 2018. (Buragohain, 2020)

Kerala blessed with her picturesque beauty and pristine nature is inherently strong in travel and tourism and the industry constituted 10 percent of Kerala's SGDP and contributed a significant 23.5 percent of total employment in Kerala. Thus the Travel and Tourism industry is one of the major

revenue-generating sectors of Kerala. Foreigners and domestic tourists used to frequent Kerala throughout the year. Kerala's nature-rich tourist spots, along with various art forms and rituals make it attractive to tourists. The Covid-19 pandemic has turned everything upside down as people refrain from travel and indulge in a new culture of self-isolation.

The present study is structured in the following ways. Section two delineates the objectives and hypotheses of the study. Section three outlines a brief review of the literature concerning the subject under the study. Section four briefly depicts the methodologies used in the study. Section five elaborates the results and its discussions. Section six summarizes the important findings of the study.

2. OBJECTIVES AND HYPOTHESES

The primary objective of the study was to analyze the impact of the Covid 19 pandemic on the business prospects of the Travel and Tourism industry in Kerala. The following hypotheses were formulated for meeting these objectives :



H₀₁: The Median difference between Average quarterly turnover before lockdown and average quarterly turnover during lockdown equals zero.

H₀₂: The Median difference between average occupancy rate before lockdown and average occupancy rate during lockdown equals zero.

H₀₃: There is no significant association between the types of organization and average quarterly turnover before lockdown.

H₀₄: There is no significant association between the types of organization and average quarterly turnover during lockdown.

3. REVIEW OF LITERATURE

Škare, Marinko et al. in their pioneering study on potential effects of Covid-19 pandemic on the tourism industry estimated the impact of the pandemic crisis on the tourism industry worldwide and concluded that recovery of the tourism industry would take more time than the average expected recovery period of 10 months. (Škare et al., 2021)

Gössling, Stefan et al. in their paper compared the impacts of COVID-19 to previous epidemic/pandemics and other types of global crises and explored how the pandemic might change society, the economy, and tourism. It discussed why COVID-19 was analogous to the ongoing climate crisis, and why there was a need to question the volume growth tourism model advocated by UNWTO, ICAO, CLIA, WTTC, and other tourism organizations. (Gössling et al., 2020)

Monica Chaudhary et al. in their study assessed the impact of Covid-19 on affected sectors such as aviation, tourism, retail, capital markets, MSMEs, and oil. As International and internal mobility was restricted, revenues generated by travel and tourism would take a major toll on the GDP growth rate. (Chaudhary et al., 2020)

Kumar A in his study analyzed how the Covid outbreak broke the backbone of the tourism industry across the country causing a massive loss in employment to 38 million people associated with the

industry. The study also highlighted industry association efforts to pursue a series of reliefs from the central government such as extending the loan repayment proposal by the RBI by three months to six months and complete exemption in GST for one year for the tourism, travel, and hospitality sectors. (Kumar, 2020)

Swarna Abirami, L in her study attempted to discover whether tourism marketing was effective to customers after covid-19 in Kerala and whether customers were willing to go to tourist places after covid-19 and the study also attempted to analyze whether tourism marketing reached the customers through social media as well as checked whether customers were willing to travel after covid-19. (Swarna Abirami, 2020)

4. RESEARCH METHODOLOGY

The population of the study consisted of the service providers in the travel and tourism industry namely, the travel agents, tour operators, amusement parks, and hotel chains. The area selected for study was in the Ernakulam district of Kerala State. The sample size of the study was limited to 50. A well-structured questionnaire was constructed and data were collected online. The study utilized statistical tools such as five-point Likert scale analysis, Wilcoxon Test, Chi-Square Test for analysis and inferring conclusions.

5. RESULTS AND DISCUSSION

5.1. Likert Scale Responses on various dimensions of Business in Travel and Tourism

Under this section, the results of the analysis of data collected through the survey are discussed. The study analyzed the business of the Travel and Tourism industry before and during the Covid-19 pandemic. A five-point Likert scale analysis was done and their results are discussed below.



Table 5.1: Likert Scale Responses on various dimensions of Business in Travel and Tourism (Frequency)

Various Dimensions of Business	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
You maintain contact with the clients via online	0	1	11	24	14
You face a shortage of staff during Covid-19	0	4	3	30	13
Govt aid is required in the Travel and Tourism Industry to cope with the current situation	0	1	2	18	29
The travel and tourism industry can reopen with full precautions against Covid 19	0	2	7	29	12
The present precautions and safety measures are appropriate for the Travel and Tourism Industry which are opened in non-containment zones	0	6	9	25	10
Conducting meetings through online mode has affected your business	0	6	9	23	12
You have planned to reschedule customer visits post lockdown	0	6	12	24	8
The customers or tourists have a fear or hesitation to the services provided during covid-19	1	1	4	27	17
Travel needs of employees were met during Covid-19	0	16	12	19	3
Work from home option is available to employees	0	13	5	21	11

Interpretation of the Likert Scale table in percentage terms

Concerning the respondent's opinion regarding contacting their clients online during this pandemic crisis, the study observes that 76% of the respondents either agree or strongly agree while 22% hold a neutral stand. Only a meager 2 % disagree with this opinion. Concerning the experience of respondents regarding a shortage of staff during the Covid Pandemic, 86% of the respondents either agree or strongly agree to this aspect, 6% remain neutral while 8 % do not experience any sort of shortage of staff during these times. Concerning the respondent's opinion regarding government aid, 94% of the respondents either agree or strongly agree with government aid during these unprecedented times of calamity. Only a negligible 2% decline in any sort of government aid.

Concerning the respondent's expectation regarding reopening of the travel and tourism industry with full precautions, 82 % of the respondents either agree or strongly agree while only 4% express a pessimistic attitude towards reopening and regarding the appropriateness of present precautions existing in the industry, 70% either agree or strongly agree while 12 % exhibit disagreement.

70% of the respondents either agree or strongly agree that conducting a meeting with their clients online has affected their business and 88% of the respondents either agree or strongly agree that customers of the tourism and travel industry face apprehensions regarding the services provided during the Covid pandemic.

It is evident from the analysis that only 44 % of the respondents met the travel needs of their employees during the Covid pandemic while 32 % decline and 24% remain neutral regarding this aspect. 64% of the respondents agreed their employees to work from home while 26% objected to this during the Covid pandemic.

5.2. Wilcoxon Test on average quarterly turnover before and during Lockdown

A Wilcoxon test was conducted to test the first hypothesis as the two related variables are in ordinal form using a scale from 1 to 3 where 1 represents an average quarterly turnover below 1 lakh, 2 represents average quarterly turnover between 1 lakh and 5 lakh and 3 represents average quarterly turnover above 5 lakhs. The responses were subjected to SPSS tests and the results are as follows.



Null Hypothesis: The Median difference between Average quarterly turnover (before lockdown) and

average quarterly turnover (during lockdown) equals zero.

Table 5.2.1: Descriptive Statistics			
	Sample Size	Mean	Std.Deviation
Average quarterly Turn over (Before lockdown)	50	2.44	.644
Average quarterly Turn over (during lockdown)	50	1.30	.505

The mean value of 2.44 before lockdown implies that average turnover was rather high almost nearing 5 lakh while the mean value of 1.3 implies a rather low turnover almost close to 1 lakh during the

Covid pandemic lockdown. Dispersion is slightly higher before lockdown than during the lockdown.

Table 5.2.2: Ranks		
Negative Ranks	Positive Ranks	Ties
38	0	12

Negative Ranks imply that there are 38 cases where the Average quarterly Turnover (during lockdown) is less than the Average quarterly Turnover (Before lockdown). There are zero cases where the Average quarterly Turnover (during lockdown) is greater than the Average quarterly Turnover (Before lockdown). There are 12 cases where the Average quarterly Turnover (during lockdown) is equal to the average quarterly Turnover (Before lockdown).

Test Statistics

Wilcoxon Signed Ranks Test was conducted to test whether there was any significant change in average quarterly turnover during the lockdown compared to the period before lockdown. The test statistics revealed a statistically significant negative change in average quarterly turnover, $Z = -5.542$, $p = .000$ with a large effect size of -0.55 .

Table 5.2.3: Test Statistics		
Z	P-value	Effect Size
-5.542	.000	-0.55

5.3. Wilcoxon Test on Average Occupancy Rate before and during lockdown

A Wilcoxon test was conducted to test the second hypothesis as the two related variables were in ordinal form using a scale from 1 to 4 where 1 represented an average occupancy rate between 0-20%, 2 represented average occupancy rate between 20-40 % and 3 represented average occupancy rate

between 40-60% and 4 represented average occupancy rate above 60%. The responses were subjected to SPSS tests and the results are as follows. Null Hypothesis: The Median difference between average occupancy rate (before lockdown) and average occupancy rate (during lockdown) equals zero.

Table 5.3.1: Descriptive Statistics			
	Sample Size	Mean	Std.Deviation
Average occupancy rate (Before lockdown)	50	2.96	.755
Average occupancy rate (during lockdown)	50	1.90	.839

The mean value of 2.96 before lockdown implies that the average occupancy rate was rather

high almost nearing 40-60% while the mean value of 1.9 corresponding to the lockdown period implies a



rather low average occupancy rate almost close to 20-40%. Dispersion is slightly higher during the

lockdown than before the lockdown.

Ranks

Table 5.3.2: Ranks		
Negative Ranks	Positive Ranks	Ties
37	6	7

Negative Ranks imply that there are 37 cases where the Average occupancy rate (during lockdown) was less than the average occupancy rate (Before lockdown). There are 6 cases where the Average occupancy rate (during lockdown) was greater than the average occupancy rate (Before lockdown). There are 7 cases where the Average occupancy rate (during lockdown) was equal to the average occupancy rate (Before lockdown).

Test Statistics

Wilcoxon Signed Ranks Test was conducted to test whether there was any significant change in average occupancy rate during the lockdown compared to the period before lockdown. The test statistics revealed a statistically significant negative change in average occupancy rate, $Z = -4.697$, $p = .000$ with a large effect size of -0.47 .

Table 5.3.3: Test Statistics		
Z	P-value	Effect Size
-4.697	.000	-0.55

5.4. Chi-Square Test on Type of Organization * Average quarterly turnover (before lockdown)

A Chi-Square test was conducted to measure the association between the type of organization and average quarterly turnover before the lockdown. Three types of organizations were considered under the study such as Private company, Sole

proprietorship, and Partnership Company. The responses were subjected to the Chi-Square test using SPSS and the resultant output of the same is given below.

Null Hypothesis: There is no significant association between the type of organization and average quarterly turnover (before lockdown).

Table 5.4.1: Test Statistics			
	Value	Degree of Freedom	P-value
Likelihood Ratio	.749	4	.945

From the resulting output, since the p-value was greater than 0.05, we failed to reject the null hypothesis and there was no significant association between types of organization and the average quarterly turnover before lockdown. Likelihood ratio $(4, N=50) = .749$, $p = .945$.

The assumption of the Chi-Square test was violated with 3 cells (33%) had an expected count of less than 5. Hence likelihood ratio was used instead of Pearson Chi-Square.

5.5. Chi-Square Test on Type of Organization * Average quarterly turnover (during lockdown)

A Chi-Square test was conducted to measure the association between the type of organization and average quarterly turnover during the lockdown. The responses were subjected to the Chi-Square test using SPSS and the resultant output of the same is given below.

Null Hypothesis: There is no significant association between the types of organization and average quarterly turnover (during lockdown).

Table 5.5.1: Test Statistics			
	Value	Degree of Freedom	P-value
Likelihood Ratio	2.534	4	.639

From the resulting output, since the p-value is greater than 0.05, it was evident that there was no significant association between types of organization and the average quarterly turnover during the

lockdown. Likelihood ratio $(4, N=50) = 2.534$, $p = .639$.

The assumption of the Chi-Square test was violated with 5 cells (55.6 %) had an expected count



of less than 5. Hence likelihood ratio was used instead of Pearson Chi-Square.

5.6. Chi-Square Test on Area of Operation * Average quarterly turnover (before lockdown)

A Chi-Square test was conducted to measure the association between the area of operation and

average quarterly turnover during the lockdown. The study considered three areas of operation such as domestic, international, and both. The responses were subjected to the Chi-Square test using SPSS and the resultant output of the same is given below.

Null Hypothesis: There is no significant association between the areas of operation and average quarterly turnover (before lockdown).

	Value	Degree of Freedom	P-value
Likelihood Ratio	5.142	4	.273

From the resulting output, it was evident that there was no significant association between areas of operation and the average quarterly turnover before lockdown. Likelihood ratio (4,N=50) = 5.142, p = .273.

The assumption of the Chi-Square test was violated with 5 cells (55.6 %) had an expected count of less than 5. Hence likelihood ratio was used instead of Pearson Chi-Square.

5.7. Chi-Square Test on Area of Operation * Average quarterly turnover (during lockdown)

A Chi-Square test was conducted to measure the association between the areas of operation and average quarterly turnover during the lockdown. The responses were subjected to the Chi-Square test using SPSS and the resultant output of the same is given below.

Null Hypothesis: There is no significant association between the area of operation and average quarterly turnover (during lockdown).

	Value	Degree of Freedom	P-value
Likelihood Ratio	4.723	4	.317

From the resulting output, it was evident that there was no significant association between areas of operation and the average quarterly turnover during the lockdown. Likelihood ratio (4,N=50) = 4.723, p = .317.

The assumption of the Chi-Square test was violated with 6 cells (66.7 %) had an expected count of less than 5. Hence likelihood ratio was used instead of Pearson Chi-Square.

6. CONCLUSION

It can be inferred from the statistical analysis and interpretation of the above facts that lockdown due to the Covid pandemic have significant and enduring negative impacts on the business prospects of stakeholders in the travel and tourism industry. Though the stakeholders take into account all the threatening aspects of the present pandemic, they strongly argue for stringent precautionary measures and at the same time demand urgent government interventions in making a resurgence of the travel and tourism industry, which is the backbone of Kerala economy. The business stakeholders in the industry are facing various crises such as inability to pay their creditors, difficulty in meeting cash flow commitments, non-payment or delayed payments by

the debtors, and insurance issues. Large negative effects of lockdown on average turnover and occupancy rate of travel and tourism industry evident from the study point towards the urgency of various remedial measures from the government in the forms of tax concessions, tax holidays, government grants, moratorium of loans.

Acknowledgment

We are greatly indebted to our students of Final B.Com Taxation, St Paul's college Kalamassery, especially Blessy Benny, Derry Annie Jacob and Don Alias for their sincere and painful efforts undertaken in data collection, without which this work would not have materialized.

REFERENCES

1. Buragohain, P. (2020). COVID-19: IT'S IMPACT ON THE TRAVEL AND TOURISM SECTOR IN INDIA. INDIAN JOURNAL OF APPLIED RESEARCH. <https://doi.org/10.36106/ijar/2409765>
2. Chaudhary, M., Sodani, P. R., & Das, S. (2020). Effect of COVID-19 on Economy in India: Some Reflections for Policy and Programme. *Journal of Health Management*, 22(2). <https://doi.org/10.1177/0972063420935541>



3. Gössling, S., Scott, D., & Hall, C. M. (2020). *Pandemics, tourism and global change: a rapid assessment of COVID-19*. *Journal of Sustainable Tourism*.
<https://doi.org/10.1080/09669582.2020.1758708>
4. Kumar, A. (2020). *Disastrous impact of Coronavirus (COVID 19) on Tourism and Hospitality Industry in India*. *Journal of Xi'an University of Architecture & Technology*, XII(V).
5. Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). *Impact of COVID-19 on the travel and tourism industry*. *Technological Forecasting and Social Change*, 163.
<https://doi.org/10.1016/j.techfore.2020.120469>
6. Swarna Abirami, L. (2020). *Tourism Marketing Through Social Media After Covid-19 in Kerala*. *International Journal of Advanced Science and Technology*, 29(7).



AESTHETICS OF THE FIGURATIVE NOVEL BY ALBERT CAMUS "THE PLAGUE"

Tursunova Nargiza Khamrakulovna

*Samarkand State Institute of Foreign Languages, Department of French Language and Literature
Senior Teacher, Independent Researcher*

ANNOTATION

In 1947 A. Camus's novel "The Plague" was published. (La Peste, 1947). At the center of this stage in the writer's work, we see the same "absurdity". Literary critic D. Nalivayko described Camus's novel "Plague" as follows: "By the nature of the genre, this work of Camus can be called a novel, which is the newest genre of intellectual prose. This genre is characterized by universality and ambiguity. The Plague is one of the greatest events in this genre, along with Kafka's Trial and Castle, Platonov's Depth, and Lord of the Flies by Golding. The Plague, written against Fascism, was considered a figurative novel. The allegory is not about "a sudden outbreak of the disease in Algeria in 194 ...", but about another catastrophe for people, no less than the plague.

KEY WORDS: *philosophy of the absurd, novel-parable, figurative novel, genre of intellectual prose, chronotope, universalism.*

INTRODUCTION

The chronicle mentioned by the author on the first pages of the novel (chronotope - 194 VA) and the time of its writing (late 1940 - spring 1942), as well as the date of publication of the work (1947), is undoubtedly a plague. In this context, first of all, it resembles a war. The details of the novel, confirming the parallel between World War II and the plague, are as follows: Oran, called a "closed city" ("ville fermée"), was attacked by rats and, in turn, was struck by the plague (the author used the word "invasion" [3, p.19,72]. The closure of the city was the beginning of a "long period of exile" in which "all lived alone, looking up at the sky." («...chacun dut accepter de vivre au jour le jour, et seul en face du ciel [3, p.79]»); such an analysis of the situation will undoubtedly affect the behavior, lifestyle and thinking of city dwellers. Some selfless and zealous people try to help victims, fight the plague: Dr. Ri is such an image that he did not think to give up, making the fight against the plague his main goal. Spiritually exhausted and physically exhausted, Dr. Ri continued to fight hard: «Le docteur regardait toujours par la fenêtre. D'un côté de la vitre, le ciel frais du printemps, et de l'autre côté le mot qui résonnait encore dans la pièce: la peste...

(l'anathèse) Et une tranquillité si pacifique et si indifférente (l'absurdité du monde – absurd world image) nait presque sans effort les vieilles images du fléau, Athènes empestée et désertée par les oiseaux, les villes chinoises remplies d'agonisants silencieux, les bagnards de Marseille empilant dans des trous les corps dégoulinants, la construction en Provence du grand mur qui devait arrêter le vent furieux de la peste... (les traits du roman-parabole quand l'auteur se tourne au sujets bibliques et mythiques – The author's reference to biblical and mythological plots - these are the details characteristic of the figurative novel - N. Kh. Tursunov). Rieux se secoua. Là était la certitude, dans le travail de tous les jours. L'essentiel était de bien faire son métier [3, p.42-44]». – *Meaning:* "The doctor was looking out the window. The spring sun was shining outside the window, and in one room the word "plague" was still ringing. And this calm, pacifying and quiet environment seems to nullify old tragedies: Athens, the cities of China where the plague left the birds, the captives of Marseilles who died in the Great Wall of Provence to block the fierce wind, and the bloody corpses thrown into the pits ... Ri trembled. This is a daily work that instills in a person self-confidence ... The main thing is that they do their job well.



Who are the people who have done a great service to the city and its people and even to their future?

MAIN PART

Dr. Bernard Rea, a 35-year-old man whose appearance is no different: «...Taille moyenne. Les épaules fortes. Visage presque rectangulaire. Les yeux sombres et droits, mais les mâchoires saillantes. Le nez fort est régulier. Cheveux noirs coupés très courts. La bouche est arquée avec des lèvres pleines et presque toujours serrées. Il a un peu l'air d'un paysan sicilien avec sa peau cuite, son poil noir et ses vêtements de teintes toujours foncées, mais qui lui vont bien...Toujours nu-tête. L'air renseigné [3, p.33]». – *Meaning*: Medium height. Broad shoulders. Almost rectangular face. Black-eyed, sharp-sighted. Big and straight nose. Cropped black hair. The mouth is tight, the lips are thick, which is always expensive. This reminds me of a Sicilian farmer: dark in the sun, with black hair on his body, always wearing a beautiful black dress ... He does not wear a hat. The image of a person who knows everything. The son of a worker who decides to become a doctor puts the interests of society above his personal interests. The author clearly describes the image of the protagonist, revealing his inner world, simplicity, through a long description given to depict his external portrait. Throughout his life, Ri also rises spiritually: at first, one, even a humane young man, gradually reveals his human qualities under the influence of those around him (comrades - Tara, Gran, Kottar, Panlu).

S.I. Velikovsky: "It seems that each of the participants in the Orange tragedy was tasked with carrying some burden on us, all this together constitutes the life philosophy of the writer Albert Camus [1, p.117]".

METHODS AND RESULTS

The only way out of the predicament that grips the entire city, according to Rea, is in action (creating an anti-plague serum to treat patients): «On ne peut pas en même temps guérir et savoir [3, p.209]». – *Meaning*: "It is difficult to fight at the same time and be aware of everything." At the urging of his profession, Ri learned to face the truth. To do this, you need to find strength in yourself, and not hide from the truth, it is more useful to draw conclusions for yourself. The vices that gripped the city gave strength to its life skills. It was Ri who was responsible for opening hospitals, creating and managing medical teams, while staying awake day and night, caring for the sick and sick. He already has a strong opinion: «...il ne s'agit pas de l'héroïsme dans tout cela. Il s'agit d'honnêteté...la seule façon de lutter contre la peste, c'est l'honnêteté... dans mon cas, je sais qu'elle consiste à faire mon métier [3,

p.159]». – *This means*: "It's not about heroism in the midst of adversity," Ramberg said. "It's about honesty ... For example, in my case it's about doing my job. "One of Ri's comrades, Jean Tarou, who later became friends with the doctor, was the first to meet him in the stairwell: «Le docteur croisa dans l'escalier un homme encore jeune, à la silhouette lourde, au visage massif et creusé, barré d'épais sourcils [3, p.17]». – *Meaning*: "On the staircase, the doctor came across a young man with a big fat face and bushy eyebrows. The reader is introduced to this young man as a chronicler: «Les premières notes prises par Jean Tarrou datent de son arrivée à Oran. Elles montrent, dès le début, une curieuse satisfaction de se trouver dans une ville assez laide...[3, p.28]». – *Meaning*: "Jean Tarou made his first notes on paper since his arrival in Oran. At first it was strange that he was happy to come to the city in such a difficult situation ... "

Taru is a generous, easy-going person who is easily accustomed to any environment, but willingly, voluntarily extends a helping hand to medical staff. ... Arriving in the city shortly before the tragedy, Taru, who introduced himself as a stranger, did not hesitate to join the medical team, since he had gone through many good and bad days - we know this from his conversation with the doctor. At this point, he returns to the plot of "The Stranger": Tara is the son of the same prosecutor who investigated the unfortunate Merson. Meursault also saw a teenager in the courtroom, staring at the defendant: «...l'un d'entre eux, beaucoup plus jeune, habillé en flanelle grise avec une cravate bleue, avait laissé son stylo devant lui et me regarder. Dans son visage un peu asymétrique, je ne voyait que ses deux yeux, très claires, qui m'examinaient attentivement...Et j'ai eu l'impression bizarre d'être regarder par moi-même [4, p.132]». Tara told Dr. Rea about this tragic event: «Quand j'ai eu dix-sept ans, en effet, mon père m'a invité à aller l'écouter. Il s'agissait d'une affaire importante, ...il avait pensé qu'il apparaîtrait sous son meilleur jour [3, p.237]». – *Meaning*: At about seventeen years old, my father invited me to court. It was a very important investigation, and my father was trying to show me the brightest side.

Unfortunately, the opposite happened. Yang's prosecutor probably didn't even think about losing his son after his father sentenced Meursault to death. The father's verdict impressed his son as a "killer in a red coat." [1, p.13]: «Transformé par sa robe rouge, ni bonhomme ni affectueux, sa bouche grouillait de phrases immenses, qui sans arrêt, en sortaient comme des serpents [3, p.238]» (comparaison métaphorique). – *Meaning*: "Covered in a red mantle, there is not even a trace of goodness and humanity in him, terrible expressions constantly



emanate from his mouth, as if one snake after another is tearing out of his mouth." In the passage quoted, he described the prosecutor's speech in metaphor.

After that, the son completely abandoned his father's house and a prosperous life and decided to seek the truth: first, Taru joined the revolutionaries, but once, having witnessed the revolution, he came to the conclusion: I lived by faith in what. Now I know that I have indirectly sentenced thousands of people to death ...» – «...pendant toutes ces longues années où pourtant, de toute mon âme, je croyait lutter justement contre la peste. J'ai appris que j'avait indirectement souscrit à la mort ... [3, p.241]». He refused to fight under torture of conscience, and since then he adhered to the rule of life, which was based not on the Christian doctrine of "murder", but on an inner belief in the correctness of his path, because he also began to claim to "holiness." His "righteous statement", subjected to psychological torture, suggests that it is Tara, and not Dr. Ri, who is the opponent of the Priest Panlu. Because he strives for the ascension of people, for "godless holiness." («Peut-on être un saint sans Dieu [3, p.244]? »). Taru has faced a number of evils since childhood, realized the absurdity of life, tried to maintain a certain degree of purity of heart, and his actions seem to prove that he is a supporter of good and an opponent of evil. He joins the ranks of the doctors, Gran, Richard, Castel, Panloulard in solidarity to help the suffering townspeople. Unfortunately, Taru dies of the plague in one of the last days of the epidemic, which was another big loss for Ri: «Il devait rester sur le rivage, les mains vides et le cœur tordu, sans armes et sans recours, une fois de plus, contre ce désastre [3, p.279]». – *Meaning*: "Rea again found herself helpless on the shore, empty-handed and heartbroken from separation, unarmed and helpless in the face of a terrible disaster."

The journalist Raymond Rambert, like Tara, is a "foreigner" - both live in the same conditions and face the same problem: should they participate in the tragedy or should they leave the city affected by the natural disaster? Rambert tried to get out of Oran, using all his acquaintances, connections and opportunities. In Paris, a girl was waiting for him, but, unfortunately, this did not work. Thus, the author pushes the topic of love into the background, because even Dr. Ri himself could not imagine a choice - his wife is seriously ill and needs his help. Staying with a sick wife and caring for the epidemic or fighting her - the doctor chose the second option. According to the author, it is difficult to have true love in the conditions of a mass plague; after all, the personal passion of two people inevitably separates them from the outside world. On the other hand, a cruel and evil plague in the history of mankind

divides loved ones and calls everyone to a mass struggle. The loss of a loved one becomes the common lot of plague fighters. "Thus, - writes Camus in one of the plans of the Plague, - separation and emigration should be the main theme of the work [2, p. 243]".

Thus, two outsiders, Jean Tarou and Raymond Rambert, remained helpless in the isolated and quarantined city. Raymond Rambert, a young journalist from Paris who came to Oran through the ranks, had to do a little investigation to study the living conditions of the Arabs living here. He was on the side of the "winners" of the Spanish war, and his thinking and outlook underwent significant changes: «Je ne crois pas à l'héroïsme, je sais que c'est facile et j'ai appris que c'était meurtrier [3, p.163]». – *This means*: "I do not believe in such an easily achievable heroism, I knew it would end badly." After such a life lesson, he became a supporter of "selfish" love (to leave the plague-stricken city and return to Paris - to his beloved, to a safe place), but in the end decided to stay in the city and form sanitary detachments in it. collaboration with Dr. Taru and Gran. Over time, the obstacles will disappear one by one, and Oran will have a chance to leave, but suddenly the journalist changes his mind. How can this be explained? This decision was made a long time ago - at some point Rambert realized that he was directly involved in all the events taking place in the city, and it was no coincidence that he joined the ranks of paramedics: «...il peut y avoir de la honte à être heureux tout seul...J'ai toujours pensé que j'étais étranger à cette ville et que je n'avais rien à faire avec nous. Mais maintenant que j'ai vu ce que je suis d'ici, que je veuille ou non. Cette histoire nous concerne tous [3, p.204]». – *Meaning*: being happy alone is a shame ... I considered myself a stranger in the city and considered it inappropriate to spend time here with you. But now, after what I have seen and experienced here, whether I want it or not, I am that hero. These events affect all of us equally. "

The image of "Madman" Joseph Gran is completely different from the main characters mentioned above. A humble mayor's office official performs his duties with unconditional obedience, without obedience. Disappointed with love in life (he leaves his wife with whom he lived for many years), he hunts for a book, long and persistently looking for the first sentence, imagining a mysterious and strange girl in the distance: «Par une belle matinée de mai, une svelte amazone, montée sur une superbe jument alezane, parcourait les allées fleuries du Bois de Boulogne [3, p.204]...» – *Meaning*: "Beautiful morning in May. In the flower-strewn alley of the Bois de Boulogne, a beautiful girl was riding a beautiful horse ... " What is your grandmother's hard romance about the mayor's office about? The answer



is simple and clear: about love; uses funny, ugly, inappropriate words and meaningless phrases in his speech: "... Joseph Grahn... is the most typical representative of the junior servant. Novcha wears a thin, wide jacket - he deliberately buys one size up, probably thinking it will last longer. He has several teeth in his lower jaw, and there are no teeth left at the top. The main thing is that Joseph Grahn could not find the right words. Refuses to use words such as "gratitude", which he considers "degrading human dignity." dignity"... Due to his ability to find clear facial expressions, Masuvo Gran performed the most humble tasks until his hair turned gray. – «Joseph Grand n'était rien de plus que le petit employé de mairie dont il avait l'allure. Long et maigre, il flottait au milieu de vêtements qu'il choisissait toujours trop grands, dans l'illusion qu'ils lui feraient plus d'usage. S'il gardait encore la plupart de ses dents sur les gencives inférieures, il avait perdu en revanche celles de la mâchoire supérieure... d'un autre côté, il se refusait à utiliser les termes de «bienveillance», «solliciter», «gratitude», dont il estimait qu'ils ne se conciliaient pas avec sa dignité personnelle... faute de trouver le mot juste, notre concitoyen continua d'exercer ses obscures fonctions jusqu'à un âge assez avancé [3, p.47-48]». Despite his invisible image, Gran possesses human qualities that enhance his spiritual image: dignity, pride, dedication to his work and his beloved. Rie repeatedly observed the oddity of the mayor's office ... inappropriate arguments in the conversation, especially since in the local dialect the use of simple outdated phrases such as "magic weather" or "legendary, enchanting lighting" (irony)). – «Rieux avait déjà noté cette manie qu'avait Grand, né à Montélimar, d'invoquer les locutions de son pays et d'ajouter ensuite des formules banales qui étaient de nulle part comme «un temps de rêve» ou «un éclairage féerique [3, p.46]» (l'ironie, la métaphore). He writes a sad and tragic novel about love, without which there is no meaning in his life. This novel can be called a kind of love letter to his wife, who, apparently, carried his love through her entire modest life, writing letters to her at special difficult moments of her life: «Ma bien chère Jeanne, c'est aujourd'hui Noël... [3, p.251]». – *Meaning*: "Dear Jeanne, today is Christmas ...". But as soon as he returned to his work, "he introduced his Amazon and completed the assignment as honestly and as in the brochure." – «...il était fatigué par cette recherche qui l'absorbait tout entier, mais il n'en continuait pas moins à faire les additions et les statistiques dont avaient besoin les formations sanitaires [3, p.136]».

CONCLUSION

Service and watch for the doctor and his assistants are just daily work. This is not a "duty," it

is simply adversity to be done day in and day out, generating more regret and remorse than satisfaction and pleasure. What could be worse than doing something that does not benefit the person!

The conclusions of S.I. Velikovskiy about the work are as follows: "Indomitable spiritual power against the violence of death - the difference between Plague and other works created by Camus - can be described as follows, for which he is so grateful to the Resistance Movement. ... Such a high rating of "Plague" testifies to the high quality of the works created after the war. After all, later works were born out of the mood and mood of the period, including Camus's 'absurd philosophy' of this period. "

BIBLIOGRAPHY

1. Великовский С.И. Грани несчастного сознания. Театр, проза, философская эссеистика, эстетика Альбера Камю. Москва, «Искусство», 1973. – 139 с.
2. Фокин С.Л. «Альбер Камю. Роман. Философия. Жизнь». СПб.: Издательство «Алетейя», 1999. – 384 с. (серия «Gallicinium»).
3. Camus A. *La Peste*. Edition Bélin/Gallimard, 2012. – 351 p.
4. Camus A. *L'Etranger*. Edition Gallimard, 1942. Rééditer en 2000. – 188 p.



INFLUENCE OF SUPERVISION ON ORGANIZATIONAL EFFICIENCY IN THE NIGERIAN BANKING SECTOR

John Ldama (Ph.D)

Department of Business Administration, Adamawa State University, Mubi-Nigeria,

ABSTRACT

This study identified how banks are being faced with the challenges of inadequate supervision, planned inappropriate operations, failure to correct known problems and supervisory violation. The main objective of this study is to examine the influence of supervision on organizational efficiency in the Nigerian Banking Sector. The study adopted exploratory research design; the population is made up of the entire staff of UBA/First Bank, Mubi which is made up of 71 staff. The instrument used for collecting data from the respondents is the questionnaire, and the data collected from the respondent was analyzed using percentage analysis. The Pearson Correlation shows the relationship between the variables there is relationship between autocratic supervision, independence supervision, democratic supervision and organizational efficiency since ($R = 0.882, 0.324, 0.999, \text{ and } P < 0.05$). The finding revealed that banking sec supervisors mainly rely on threats and punishment to influence employees performance, supervisors don't allow employees inputs in decision making. The finding further revealed that supervisors feel that autocratic supervision is not bad for their subordinates. Finding shows that autocratic practices of their supervisors make them to have less or no self-confidence, because their supervisors don't appreciate their skilled, experienced and education. The study therefore, recommends that there is need for management of banking sector to understand that relying on threat and punishment to influence employees is not the best method to increase performance; there are many ways in which employee can increase their performance. The management can decide to give employee opportunities to participate in decision making and appreciating their kills, experience and education will make them to have self-confidence and will inturn enable them to increase the level of their productivity.

KEYWORDS: *Banking sector, efficiency, impact, organizational and supervision*

INTRODUCTION

Traditionally, when people talk about “supervision” they are usually referring to the managerial or leadership function of overseeing the efficiency and progress of employees – typically the employees who report directly to the supervisor. Bernard (2005), defines supervision as the ability of superiors to influence the behaviour of subordinates to take a particular course of action. It is the art of influencing people towards achieving organizational goals. He further clarifies that quality of supervision therefore refers to the effectiveness of the superiors in influencing the behaviour of the subordinates in taking a particular course of action.

Supervision is a delicate and often misunderstood function that can have a variety of effects on employees' efficiency. In some situations,

supervision can help improve results, while in others it can be a distraction to the effectiveness of the staff. Appropriate supervisory intervention and a good supervisor/supervisee relationship in the workplace can consistently improve employees' efficiency. But, as research clearly demonstrates, it is not only in the best interest of the employee, but also the business, to pay close attention to the supervisor/supervisee relationship. This relationship is critical to the success of the employee and ultimately the organization. We need to have well trained supervisors who are prepared to provide the necessary and appropriate guidance, structure, and encouragement to their staff (Linda, 2014).

Stemming from their experiences in providing both training and supervision to employees, Rising Sun's Consultants' approach to supervision takes a



very different perspective; defining supervision more from a coaching and mentoring perspective than from a managerial perspective. They define supervision as a developmental process designed to support and enhance an individual's acquisition of the motivation, autonomy, self-awareness, and skills necessary to effectively accomplish the job at hand. Efficiency can be defined as a measure of the productivity of a person, machine, factor, system, etc., in converting inputs into useful output (<http://www.businessdictionary.com>). Efficiency is computed by dividing average output per period by the total costs incurred or resources (capital, energy, material, personnel) consumed in that period. Efficiency is a critical determinant of cost productivity (Shilpa, 2015).

Most, employees are promoted to the role of supervisor because of their strong technical expertise. However, an effective supervisory relationship requires that the supervisor not only be a content expert, but also accept the enormous responsibility of mentorship. Unfortunately, poor supervision has an enormous impact and cost for both the employee, as well as the organization as a whole (Harris, 2007).

Providing regular supervision for subordinates increases organizational efficiency and overall performance. It is observed that autocratic, independent and democratic supervision have positive and negative effect on organizational efficiency depending on the type of the organizational structure and supervisor ability to lead effectively (Zivnuska & Shaw, 2007).

Supervisors should compare employees' work efficiency against the standards and expectations. Democratic supervision sessions also allow employees to express concerns and ask questions as things come up, rather than having to wait all year to touch base at their annual review. By being available to connect with employees, supervisors monitor efficiency on a more consistent basis. In turn, they detect concerns and resolve issues arising more promptly (Zivnuska & Shaw, 2007).

Offering employees feedback on their work is an effective way of monitoring their progress and letting them know how well they performed a particular task or project, which is a form of supervision. Furnishing employees with constructive notes make them feel their work is valued and appreciated, without having to meet in a formal setting (Harris, 2007). This study will take in cognizance the importance of supervision surrogates i.e. (autocratic supervision, independent supervision and democratic supervision and how each of the surrogates influences organizational efficiency) in Banking sector.

Statement of the Problem

For over a decade, supervision methods such as monitoring, support and evaluation must come into play. Records of action plans, monitoring and follow up reports show that supervision goes on in every unit, but unfortunately the effect does not seem to show in the work life of employees, most especially in public organizations. Even though, First Bank and UBA Bank Plc are not in any way different from other organizations because the banks are being faced with the challenges of inadequate supervision, planned inappropriate operations, failure to correct known problems and supervisory violation.

In recent times, many authors have tried to highlight the importance of supervision and its influences on organizational efficiency but still have their shortcoming; David (2009) only focused on improving organizational efficiency of employee, not capturing element of supervision, another study carried out by Joyce (2012) focused on effect of supervision on staff Performance in Ga South municipal education directorate, the study succeeded in identifying effect of supervision on staff performance but not efficiency and the study was carried on educational sector not banking sector, in the same vein, Novianita and Si (2017) succeeded in identifying the effect of supervision and professionalism on staff performance in the office of social affairs in East Jakarta Administrative City, again the study is not focused on banking sector.

The study of (Joyce, 2012; Novianita and Si, 2017; David, 2009; Zivnuska & Shaw, 2007) on supervision and its influence on organizational efficiency, show that effective supervision has impact immensely on the organizational efficiency in organization. Eventhough, most of their findings were not based on Nigeria context, their study didn't look at surrogates of supervision and how each of them affect employees' performance, some of the studies didn't clearly states its methodology, level of significant; in addition, their studies failed to test the reliability of their instruments. And the studies may probably have different results if those same studies were conducted in Nigeria.

This study tends to fill this gap by examining the influence of supervision on organizational efficiency, looking at how each surrogates of supervision (autocratic supervision, independent supervision and democratic supervision) influences organizational efficiency individually in a single study, using First Bank and UBA Bank Plc, as a case study.

The study however, collected relevant data in order to test the following hypotheses;

H_0 : Autocratic supervision does not have significant influence



- H_0 : organizational efficiency in banking sector; Independent supervision does not have significant influence on organizational efficiency in banking sector; and
- H_0 : Democratic supervision does not have significant influence on organizational efficiency in banking sector.

CONCEPTUAL CLARIFICATIONS

Concept of Supervision

Supervision has been defined as: 'The provision of guidance and feedback on matters of personal, professional and Educational development in the context of a trainee's experience of providing safe and appropriate employee care' (Kilminster, 2007). Supervision is an administrative process through which the leader ensures that his subordinates are all contributing towards discharging their duties effectively. Hammock and Owing in Nwaogu (2014) stated that supervision attempts to look into the organization of learning programmes, method of evaluating, reporting and determining employee's progress, the treatment methods, the philosophy and practicing of discipline, the time schedule, place and procedure of staff meetings, the study and use of the community resources.

According to Goldhammer and Krajewski (2010), supervision refers to a close observation, detailed face-to-face interaction between the supervisor and the subordinates' staff with the aim of binding the two in an intimate professional relationship. Supervisors have come under pressure, several times on their effect on staff performance. However, no matter what criticisms are leveled against them, their contributions cannot be over emphasised. If supervisors have the responsibility of improving staff performance by equipping them with knowledge, interpersonal skills, and technical skills then one will say that organisations cannot do without supervisors' involvement (Bernard & Goodyear 2004).

Supervision seeks to equip individuals with the necessary knowledge, attitudes and skills to make them useful; not only to themselves but their immediate community and country. It is important that staff performance is constantly monitored and reviewed for it to be abreast with changes and developments. Today, supervision appears to be sporadic and quite often, serves as a token activity that is unable to achieve the objectives for which it is intended (Mills, 2003).

According to Wiles and Bondi (2006), Supervision is an action and experimentation aimed

at improving instruction and instructional programmes. Supervision is a way of stimulating, guiding, improving, refreshing, encouraging and seeing certain group with the hope of seeking their cooperation in order for the supervisors be successful in their task of supervision.

Concept of Organizational efficiency

Organizational efficiency is the ratio of outputs to inputs in the organization. It refers to the volume of output produced from a given volume of inputs or resources. If the firm becomes more productive, then it has become more efficient, since productivity is an efficiency measure (Samnani & Singh, 2014). It is a measure of the efficiency of production. Efficiency has many benefits at various levels. Efficiency growth is important to the firm because more real income means that the firm can meet its (perhaps growing) obligations to customers, suppliers, workers, shareholders, and governments (taxes and regulation), and still remain competitive or even improve its competitiveness in the market place (Chen, Hannon, Laing, Kohn, Clark, Pritchard & Harris, 2015). In a nutshell, high efficiency levels translate into lower unit costs and this is why Onyije (2015), terms efficiency as one of the major drivers of success in the organization. It is growing the business in a way where the employees and the employers are satisfied. There are simple factors that need to be involved for a workforce to have efficiency. First, employees need to feel that they are part of the organization and not just workers in the workplace (Skare, Kostelic & Jozicic, 2013).

Concept of Autocratic Supervision

Under this type, the supervisor wields absolute power and wants complete obedience from his subordinates. He wants everything to be done strictly according to his instructions and never likes any intervention from his subordinates. This type of supervision is resorted to tackle indiscipline subordinates (Vecchio, 2010). Authority is centralised in the key person or head, who has been legally appointed to look after the organisation. The policies and techniques of the bank programme are directed by him. Here, the authority and power may be delegated to the supervisors who are directly responsible to the head. There is quick communication between the authority and supervisors so that they can be easily contacted and ordered to carry out definite directions. All suggestions and prescriptions of duties and activities come from one person and may be passed down, the line and efficiency is checked in the same manner upward. Supervisors are appointed in establishments as the inspectors. Generally, the inspectors visit individual wards, meet them individually to solve



their problems. Employee is also assisted individually. The authoritarian supervisor remains in the focus of the group's attention (Vecchio, 2010).

Concept of Independent Supervision

This is also known as independent supervision. Under this type of supervision, maximum freedom is allowed to the subordinates. The supervisor never interferes in the work of the subordinates. In other words, full freedom is given to workers to do their jobs. Subordinates are encouraged to solve their problems themselves (Vecchio, 2010).

Concept of Democratic Supervision

Under this type, supervisor acts according to the mutual consent and discussion or in other words he consults subordinates in the process of decision making. This is also known as participative or consultative supervision. Subordinates are encouraged to give suggestions, take initiative and exercise free judgment. This results in job satisfaction and improved morale of employees (Vecchio, 2010). According to Lovell and Wiles (2000), a survey of the literature reveals that democratic supervision meant different things to different people. Giving different interpretations, Lovell and Wiles (2000) provided that "to some it meant a type of manipulation in which workers were to be treated blindly and maneuvered into doing what the supervisor wanted to do all along. To others it meant a hands-off approach what teachers could do as they pleased. But to others, it meant involving workers in cooperative instructional improvement". Thus to remove the ambiguity in understanding of Democratic supervision, it is essential to detail the context in which it originated.

The emergence of democratic supervision has been attributed to different strands of thought. As Lovell and Wiles (2000), provided "A combination of factors including the development of theoretical formulations and empirical findings as well as certain social development set in motion a challenge to the theory of scientific management and laid the foundation for a growing concern with the psychological well being of organizational members." Here authority is based on superiority of knowledge, skill and capacity and not on legal sanctions. There is decentralization of power. Every supervisor is required to contribute his best towards purposes and welfare of group. The talents of all workers are utilized fully. There is maximum possible participation of all workers in determining policies, procedures and final evaluation. Each individual personality is respected and considered of supreme value. Equality is practiced in all matters; emphasis is placed on mutual relationship and respect for one another.

Influence of Autocratic Supervision on Organizational Efficiency

Autocratic leaders are classic "do as I say" types. Typically, these leaders are inexperienced with leadership thrust upon them in the form of a new position or assignment that involves people management. Autocratic leaders retain for themselves the decision-making rights. They can damage an organization irreparably as they force their 'followers' to execute strategies and services in a very narrow way, based upon a subjective idea of what success looks like. There is no shared vision and little motivation beyond coercion. Commitment, creativity and innovation are typically eliminated by autocratic leadership. In fact, most followers of autocratic leaders can be described as biding their time, waiting for the inevitable failure this leadership produces and the removal of the leader that follows (Michael, 2010).

Influence of Independent Supervision on Organizational efficiency

The leader's ability to lead is contingent upon various situational factors, including the leader's preferred style. Contingency theories to supervision support a great deal of empirical freedom to supervision, (Independent style) Northhouse (2001). Many researchers have tested it and have found it to be valid and reliable to explaining how effective supervision can be achieved. It stresses the importance of focusing on inter personal relationships between the supervisor and the demands of various situations and employees. Under this type of supervision according to Kumar (2015), maximum freedom is allowed to subordinates. They are given freehand in deciding their own policies and methods and to make independent decisions.

It carries the belief that the most effective supervision style depends on the ability to allow some degree of freedom to employees in administering any supervision style. This study will aim to investigate further how Independent may contribute to organizational efficiency. On the other hand, much has been written in regard to the relation of positive self and effective management. Kerns (2004), discussed the relationship of values to organizational supervision and his study was hugely in support of the Independent style in bridging the gap between the employer and employee where his concern was solely on the fact that Independent would create a positive environment through which employees and employers felt like a family regardless of their positions.



Impact of Democratic Supervision on Organizational Efficiency

In other words, transformational process can be seen through a number of democratic supervision behaviors as: attributed charisma, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration Bass and Avolio, (2003). Yukl (2007), states that application of democratic supervision style can improve efficiency because democratic supervision style wants to develop knowledge and employees potential. Leader with democratic supervision provides opportunity and confidence to his subordinates to carry out duties in accordance with his mindset to achieve organizational goals. Suharto (2005), suggests that more frequent democratic supervisions behaviors implemented will bring significant positive effect to improve psychological empowerment quality of subordinates. Democratic supervision that gives attention to individual will be capable to direct vision and mission of organization, providing motivational support, and creating new ways to work effectively.

Influence of Supervision on Organizational efficiency

Supervision is an extremely vital part of a workplace that intends to maximize its success potential. It naturally follows, then, that poor supervision in a workplace is one of the primary obstacles to achieving potential success by an organization. After all, employees, no matter their task, must have the proper instruction and training to ensure that they are doing their jobs correctly, and with minimal risk of error or injury (Leiter, 2001). According to Roberson (2008), when an organization has poor supervision, there is not enough responsibility for taking action for the prevention of problems, mistakes, accidents, and injuries. Poor supervision removes a very important part of the employee support process, eliminating the opportunity for reference, learning, and safety. After the initial training has been completed, supervision remains necessary for continuing skill and knowledge development among employees. It is for this reason that many organizations today refer to their supervisors as coaches.

Tracey (2000), notes that poor supervision opens the door for unethical behaviours within an organization. With poor supervision, employees commonly feel that their work is not valued by the organization, and loyalty is difficult to form – if it forms at all. Without loyalty, employees are more likely to deviate from acceptable business practices. Such activities can include theft, decreased employee effort, using equipment without authorization, and falsifying documents, among other things.

Goal development is important in supervision because effective goal-setting activities in employee supervision are directly associated with higher employee satisfaction and performance. Having clearly defined target motivates employees to work toward their expected achievements. In turn, employees are evaluated by managers based on their performance throughout the period under review (Harris, 2007).

Poor supervision does not only mean that there is not enough supervision; it can also be the exact opposite – too much supervision. When employees feel as though they are being too heavily policed, they get the feeling that the organization does not trust or respect them. This increases tension in the workplace and decreases overall employee morale (Zivnuska, 2007). If a supervisor is not present enough, or is too overbearing, then the reaction from employees will only be fear, resentment, and displeasure in their work (Pagon, 2002). The efficiency will not be as good as expected, and the employee turnover will increase. In an organization that intends to maximize its performance and profits, a quality supervisory team should be employed and trained to ensure the very finest results from their individual employee groups. These supervisors should have their own support system, and their importance should be made very clear, to ensure the highest degree of efficiency.

Empirical Review

Study conduct by Novianita and Si (2017), on the effect of supervision and professionalism on staff performance at the office of social affairs in East Jakarta Administrative City using the sample of 50 respondents of 156 staff (study population). The study used quantitative descriptive approach in which 2 independent variables and one dependent variable with its dimension and indicator become the basis of the study in primary data collection through questionnaire distribution. Each respondent was given a total of 36 closed ended questions. Their finding research shows that there is a positive influence of supervision and professionalism on staff performance at the Office of Social Affairs in East Jakarta Administrative City both partial and simultaneously which finally build causality relation mechanism while $-value < 0.05$.

Study conducted by Jalal (2016), on improving organizational efficiency through work engagement: Empirical evidence from higher education sector, the study used primary data and survey instrument were collected from a sample of 242 employees at public universities in Northern Malaysia using an online survey method. The collected data was analyzed using Employee engagement SPSS and Structural equation modelling



on AMOS. The results indicated that work organizational efficiency engagement had significant positive effect on organizational efficiency and the P-values < 0.05 .

Joyce (2012), carried out study on the effect of supervision on staff performance in GA South municipal education directorate; a descriptive survey design was used. In other words, the study was mainly descriptive, describing the nature of supervision in the Ga South Municipal Education Directorate. A sample size of fifty was considered. By means of simple random sampling, the researcher selected nine staff under each of the four main departments. The data obtained from the questionnaires and other sources of information were analyzed using tables and charts. Each question on the questionnaire was considered as separate from the others and analyzed independently. The study explored the effect of supervision on staff performance using Ga South Municipal Education Directorate study. Having as case examines the issue through responses from respondents, it has come to bear that the work of supervisors in organisations cannot be overlooked, while the P-value < 0.05 .

The above empirical reviews identified supervision and its influence on organizational efficiency. This means that that effective supervision has impact immensely on the organizational efficiency in organization. Eventhough, most of their findings were not based on Nigeria context, their study didn't look at surrogates of supervision and how each of them affect employees' performance, some of the studies didn't clearly states its methodology, level of significant; in addition, their

studies failed to test the reliability of their instruments. And the studies may probably have different results if those same studies were conducted in Nigeria.

Theoretical Framework

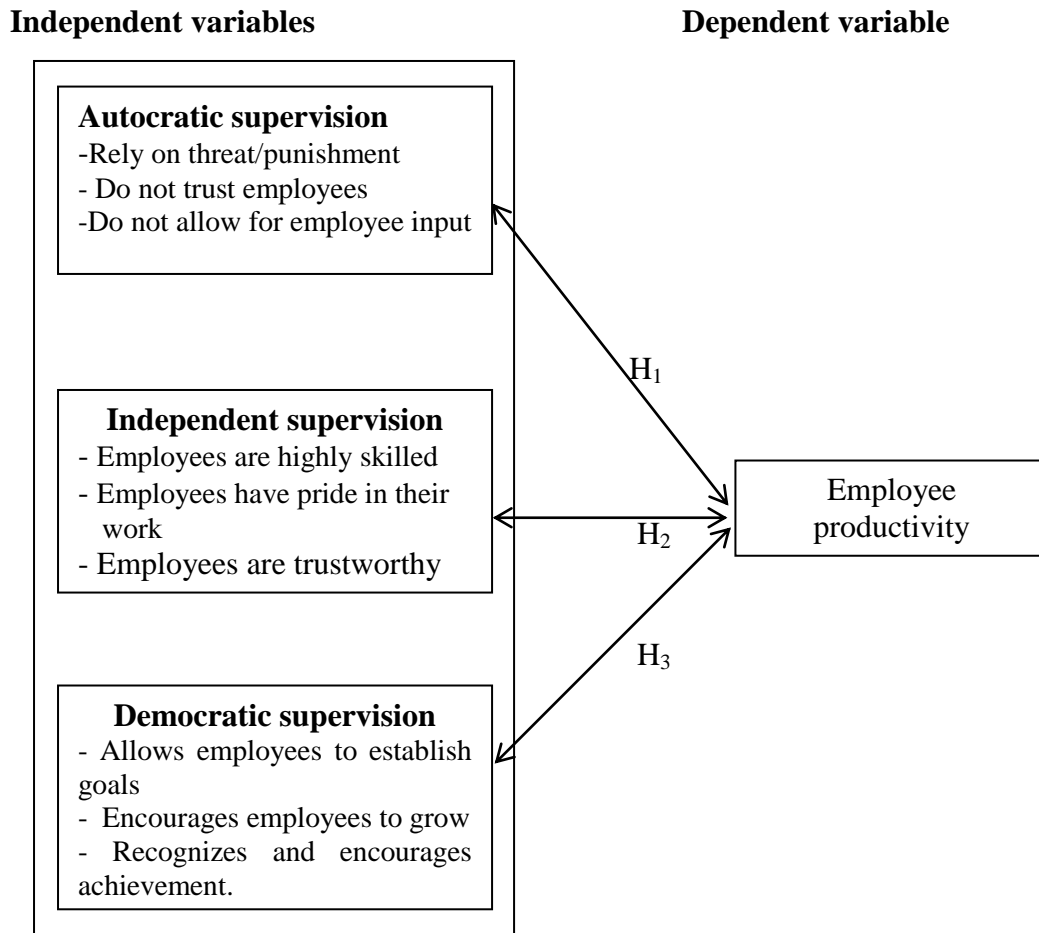
Psychoanalytic Theory

Psychoanalytic propounded by Sigmund (1890), according to the theory, supervision is by far the oldest mainly because from its inception, psychoanalysis has addressed the concept of supervision. The supervisor assists the counselor to be open to the experience that can be considered similar to mirror therapy whereby the counselor learns the analytic attitude that includes such attributes as patience, trust in the process, interest in the client, and respect for the power and tenacity of client resistance. An assumption of the psychoanalytic supervision model is that the most effective way a counselor can learn these qualities in the supervisory climate is to experience these qualities directly from the supervisor in authentic setting i.e. when he is involved in task of supervision.

For the purpose of this study, psychoanalytic theory because this theory has direct link with the subject matter under study, because the theory assumed that most effective way a supervisor can learn these qualities in the supervisory climate is to experience these qualities directly from the supervisor in authentic setting i.e. when he is involved in task of supervision he tends to motivate the employee to increase their efficiency.



Conceptual Framework



Source: Adapted from Loganbill, C., (2005). Supervision, a Conceptual Model. *The Counselling Psychologist, USA, 10(1)*, 3-42.

METHODOLOGY

This paper adopted the use of non-experimental design with specification in exploratory research design. This study was carried out in First Bank Plc Mubi and UBA Bank, Plc, Mubi. UBA has the population of 28 staff, while First bank staff population are 43 staff. Put together all is 71 respondents (Source: UBA/First Bank, Human Resource Department, 2019). Because of the small size of the population, the study was carried out on the whole population.

The study used closed ended questionnaire as the major instrument for data collection in this study; the questionnaire was design on five points likert scale ranging from strongly agree (5), to strongly disagree (1). To ensure validity, questionnaire was drafted and submitted to experts in the Department of Business Administration, Adamawa State University for vetting or scrutiny in which the corrections and suggestions to be proffered by experts was adhered to. While, the study hypotheses were tested using Pearson Correlation analysis.

ANALYSIS AND RESULTS

A questionnaire is the primary data that was used in this presentation and analysis of the data collected.

Out of 71 questionnaires distributed;

Returned	$\frac{68}{71}$	x 100	=	95.8%
Unreturned	$\frac{3}{71}$	x 100	=	4.2%



Hypotheses Testing

Hypothesis I

H₀ : Autocratic supervision does not have significant influence organizational efficiency in banking sector;

Correlations			
		AS	OE
AS	Pearson Correlation	1	.882**
	Sig. (2-tailed)		.000
	N	68	68
OE	Pearson Correlation	.882**	1
	Sig. (2-tailed)	.000	
	N	68	68

** . Correlation is significant at the 0.01 level (2-tailed).

Where:

AS : Autocratic supervision
 OE : organizational efficiency

A Pearson’s correlation analysis was conducted to examine the relationship between autocratic supervision and organizational efficiency. The result of correlation revealed that significant and positive relationships exist between the variables (r = 0.882, P

< 0.00), which is less than 0.5 level of significant. Therefore, we reject the null hypothesis and accept the alternate hypothesis, which state that autocratic supervision has significant influence organizational efficiency in banking sector.

Hypothesis II

H₀ : Independent supervision does not have significant influence organizational efficiency in banking sector; and

Correlations			
		IS	OE
IS	Pearson Correlation	1	.324**
	Sig. (2-tailed)		.000
	N8	68	68
OE	Pearson Correlation	.324**	1
	Sig. (2-tailed)	.000	
	N	68	68

** . Correlation is significant at the 0.01 level (2-tailed).

Where:

IS : Independence supervision
 OE : Organizational efficiency

A Pearson’s correlation analysis was conducted to examine the relationship between independence supervision and organizational efficiency. The result of correlation revealed that significant and positive relationships exist between them (r = 0.324, P < 0.00), which is less than 0.5 level of significant. Therefore,

we reject the null hypothesis and accept the alternate hypothesis, which state that independent supervision has significant influence organizational efficiency in banking sector.



Hypothesis III

H₀ : Democratic supervision does not have significant influence organizational efficiency in banking sector.

Correlations

		DS	OE
DS	Pearson Correlation	1	.999**
	Sig. (2-tailed)		.000
	N	67	67
OE	Pearson Correlation	.999**	1
	Sig. (2-tailed)	.000	
	N	67	67

** . Correlation is significant at the 0.01 level (2-tailed).

Where:

DS : Democratic Supervision
 OE : Organizational Efficiency

A Pearson’s correlation analysis was conducted to examine the relationship between democratic supervision and organizational efficiency. The result of correlation revealed that significant and positive relationships exist between them ($r = 0.999$, $P < 0.00$), which is less than 0.5 level of significant. Therefore, we reject the null hypothesis and accept the alternate hypothesis, which state that democratic supervision has significant influence on organizational efficiency in banking sector.

Research Findings

The following findings were derived from the above data analysis;

- i. Finding revealed that in Banking sector, most a times their supervisor relies on threats and punishment to influence employees’ productivity, supervisors don’t allow employees inputs in decision making. The finding further revealed that supervisors feel that autocratic supervision is not bad for their subordinates. Finding shows that autocratic practices of their supervisors make them to have less or no self-confidence, because their supervisors don’t appreciate their skilled, experienced and education.
- ii. From the above analysis, the finding revealed that employees don’t have pride in their work and the drive to do it successfully on their own without supervision; also their supervisors believed that they are not trustworthy and experienced. Finding also revealed due to independent supervision practice sometimes team members are no longer taken seriously. Furthermore, the

- iii. finding revealed that there is misuse of rules due to independent supervision they have; also their supervisor doesn’t usually allow them to establish goals. In addition, above analysis revealed that in banking sector, supervisor encourages employees to grow on the job and be promoted and inturn don’t recognize and encourages their achievement. Finding further revealed that due to democratic supervision practiced sometimes in the organization, there is not enough time to get everyone’s input, moreso, the management feels threatened by this type of democratic supervision. A finding also shows that employee don’t receive credit for work done in order to increase their productivity level.

CONCLUSION AND RECOMMENDATIONS

From the result of hypotheses tested the study concludes that there is negative relationship between the practice of autocratic supervision and employee efficiency in Banking sector, this implies that autocratic supervision does not lead to high employee efficiency. This is because most a time their supervisors relied on threats and punishments to influence employees’ productivity, employees are not allowed to contribute to decision making, supervisors feel that autocratic supervision is not bad for their subordinate. Meanwhile, employees feel that autocratic practices of their supervisors make them to have less or no self-confidence, because their supervisors don’t appreciate their skilled, experienced and education.



In addition, the hypotheses tested shows that their independence supervision have both negative and positive impact on employees' productivity in Banking sector depending on how the employee perceived the independent given to them to exercise their intelligence and expertise. Though, the result shows that employees don't have pride in their work and the drive to do it successfully on their own without supervision; also their supervisors believed that they are not trustworthy and experienced to carry out their duties without supervision. Independent supervision practice sometimes team members are no longer taken seriously, there is misuse of rules due to independent supervision they have, also their supervisor doesn't usually allow them to establish goals.

The study further concludes that democratic supervision has positive impact on employee efficiency in Banking sector. Despite the fact that their supervisors encourage them to grow on the job and be promoted and inturn don't recognize and encourages their achievement, which can only hinder their increment level of productivity. Due to democratic supervision practiced sometimes in the organization, there is not enough time to get everyone's input, moreso, the management feels threatened by this type of democratic supervision and their employees don't receive any credit for work done in order to increase their productivity level.

Recommendations

The following recommendations are derived from the above findings;

- i. There is need for management of Banking sector to understand that relying on threat and punishment to influence employees is not the best method of increase productivity; there are many ways in which employee can increase their productivity. The management can decide to give employee opportunities to participate in decision making and appreciating their kills, experience and education will make them to have self-confidence and will inturn enable them to increase the level of their productivity.
- ii. On the part of the employees, there is need for them to have self pride and zeal to carried out their work successfully without or little supervision, this can generate a high level of trust for them, and also should encourage teamwork among them, thereby avoiding any form of rules misuse so as to enable their supervisor to give them opportunity to establish goals that will help the organization to reach a high peach of productivity.

- iii. The management of Banking sector should always encourage their employees to increase their productivity in order to be promoted within the stipulated time by recognizing their little effort and achievement, which will go a long way in stimulating their zeal towards increasing their productivity also the management, should always give their employees credit for work done well.

REFERENCES

1. Bernard, K. & Goodyear, L. (2004). *Strategic Planning: A Leadership Imperative*. Alexandria, VA: American Society for Training and Development.
2. Chen, L., Hannon, P.A., Laing, S.S., Kohn, M.J., Clark, K., Pritchard, S. & Harris, J.R. (2015). *Perceived Workplace Health Support Is Associated with Employee Productivity*, *American Journal of Health Promotion: AJHP*, 29(3), 139-146
3. David, C. (2009). *Improving Employee efficiency and Efficiency*. *Management and careers*. *Government Finance Review*. 53.
4. Goldhammer, R. & Krajewski, R. J. (2010). *Clinical supervision: Special methods for the supervision of teachers*. New York: Holt, Reinhart and Winston.
5. Harris, K. J., Kacmar, K. M., Zivnuska, S., and Shaw, J. (2007), *The impact of political skill on impression management effectiveness*, *Journal of Applied Psychology*, 92, 278–285.
6. Jalal, H. (2016). *Improving employee efficiency through work engagement: Empirical evidence from higher education sector*. *Athens Journal of Business and Economics*, 4(2),192-219.
7. Joyce, O. A. (2012). *The Effect of Supervision on Staff Performance in GA South municipal education directorate*. *Commonwealth executive master of business administration institute of distance learning*, Knust.
8. Kerns, C. D. (2004). *Strengthening values centered leadership*. *Graziadio Business Report*, 7(2).
9. Kumar, R. (2005). *Research methodology: a step-by-step guide for beginners*. New Delhi: Sage Publications Limited.
10. Linda, R. (2014). *The Impact of Supervision on Employee Development*. *Hearst Newspapers*. LLC.
11. Loganbill, C., (2005). *Supervision, a Conceptual Model*. *The Counselling Psychologist, USA*, 10(1), 3-42.
12. Lovell, J.T. & Wiles, K. (2000). *Supervision for Better Schools*. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
13. Michael. A. (2010). *Leadership style and organizational impact*. Retrieved from: Morgan, G. (1988). *Teaching MBAs transformational thinking*. In R. E. Quinn & K.S. Cameron (Eds.).



- Paradox and transformation: Toward a theory of change in organization and management.* Cambridge, Ballinger.
14. Mills, K. (2003). "Good Supervisors are Good Supervisors - Anywhere." *Harvard Business Review*, (vol. 4) 1986 in Pasmore, William, A. *Designing Effective Organizations*. John Wiley & Sons: New York, NY.
 15. Mohanty, J. (2008). *Educational Management Supervision School Organisation*. New Delhi: Neel Kamal Publications.
 16. Novianita, R. & Si, M. (2017). *The Effect of Supervision and Professionalism on Staff Performance at the Office of Social Affairs in East Jakarta Administrative City*. *International Journal of Humanities and Social Science* 7, (2).
 17. Onyije, O. C. (2015). *Effect of Performance Appraisal on Employee efficiency in a Nigerian University*, *Journal of Economics and Business Research*, 21(2), 65-81.
 18. Samnani, A. & Singh, P. (2014). *Performance-Enhancing Compensation Practices and Employee efficiency: The Role of Workplace Bullying*, *Human Resource Management Review*, 24(1), 5-16
 19. Shilpa, T. (2015). *The Historical Context of Modern Concept of Supervision*. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 6(1): 79-88
 20. Skare, M., Kostelic, K. & Jozicic, K. (2013) *Sustainability of Employee efficiency as a Presumption of Sustainable Business*, *Ekonomski Istraživanja-Economic Research*, 311-330.
 21. Sullivan S. & Glanz, J. (2000). *Supervision That Improves Teaching: Strategies and Techniques*. Thousand Oaks, California: Corwin Press, Inc.
 22. Vecchio, Robert, P. (2010). *Leadership: Understanding the Dynamics of Power and Influence in Organizations*. University of Notre Dame Press.
 23. Wiles, G. & Bondi, D. (2006). *Supervision, A Guide to Practises*. Columbus, Ohio: Charles E. Merrill Publishing Company.



NATURAL RESOURCES OF MEDICINAL PLANTS OF FERGANA VALLEY

Ergashali Yu. Ruzmatov¹, Dilmurod D.Usmonov², Xusanboy E. Yuldashev³

¹*Andijan State University, Associate Professor of Ecology and Botany, Ph.D.*

²*Senior teacher of the Department of Ecology and Botany*

³*Student of Biology Education*

ABSTRACT

This article provides information on the bioecological properties, natural resources and protection of some medicinal plants common in the Fergana Valley.

KEYWORDS: *habitats, flora, natural resources, natural resources, medicinal plants, species, genus, biomass.*

INTRODUCTION

Today, the conservation and efficient use of plant and animal biodiversity is one of the most pressing issues.

One of the main tasks in the study of pharmaceuticals and vitamin-rich medicinal raw materials is to study their laws of bioecological properties, such as growth, development, biomass formation. Therefore, in our study, we focused on identifying the range of medicinal plant species and calculating their natural reserves. As a result of scientific research, the total volume of natural resources of the most common and important medicinal plants in our region, the amount of possible annual production was determined.

Prior to our study, plants in this group were poorly studied. However, only three species of the most important and significant alkaloid and glycoside plants distributed in our region (*Adonis chrysocyathus* Hook.fil. & Thomson, *Phisochlaina alaica* Korotkova, *Vinca erecta* Regel & Schmalh.) Were studied by Abubakirov and Yamatova (1961). First, 40-50 years have passed since the study of these species. Second, in recent years, under the negative influence of anthropogenic factors, the natural state of vegetation has undergone a number of changes. Therefore, the data of the study on medicinal plants named above

(Jalolov, 1968; Hakimov, 1980; Hamidov et al., 1995) are outdated. It cannot reflect the current state of affairs. An analysis of the literature has shown that data on the total area of the *A. chrysocyathus* plant have been provided, but, raw material resources have not been identified. *Aconitum seravshanicum* Steinb. The available areas of the plant and their reserves were not mentioned. Only, there are data on the distribution areas of *V. erceta* species belonging to the family *Apocynaceae* and their reserves. The groundwater and surface parts (biomass) of this plant, even in some areas (streams, river basins), are listed and published as their raw material (Hamidov et al., 1998).

METHODOLOGY

Medicinal plants in the Fergana Valley have special methods for determining their distribution and reserves in nature. In conducting the study, Krilova and Shreter, 1971; Schreter et al., 1986 methods were used. These methods are characterized by simplicity and accuracy.

RESULTS

As a result of our research, we provide information on *V. eresta* areas and natural resources distributed in the Fergana Valley (Tab.



1). It turns out that the area and natural resources of this plant are large enough. It was noted that the most common areas are the southern part of the Fergana Valley. It is widespread in the northern

foothills of the Alay mountain range in the villages of Shohimardon, Yordan, around Tamasha and Nodirmatsay. Its total area in Izbosar, Karadavan and Mashalangsay is more than 100 hectares.

Table 1

Reserves of *V. eresta* type in the Fergana valley

Arrays	Area, hectares	I category area, hectares	II category area, hectares	Surface reserve, tons	Subsoil reserve, tons	Annual preparation rate	
						surface, tons	underground, kg
Tamasha	61	28	33	6.1	3.1	1.3	310
Nodirmatsoy	60	26	24	6.7	3.4	1.3	340
Izbosar	39	10	29	9,7	3.1	1.9	310
Qoradovon	35	-	35	3.5	1.4	0.7	140
Mshalang	30	-	30	3.0	2.2	0.6	220
Total	215	64	151	29,0	13,2	5,8	1310

As a result of our research, we identified the total area and raw material resources of 46 species of medicinal plants that are widespread and considered important in the Fergana Valley (Tab. 2). The total area of these species is 10,304 hectares. The species that grow in the largest areas of them are: *Perovskija scrophulariifolia* Bunge (Tayjanov, 1994) with an area of 4450 hectares. This essential oil plant is found

in very large areas around the villages of Shohimardon, Jordan, Mashalangsay, Dugobasay, Tamasha, Izbosar, Nodirmatsay and other arrays. It forms thick coverings on dry, rocky gravel substrates and around streams, on all terraces of the above streams. *P. scrophulariifolia* is a tall plant that forms a large mass.

Table 2

Stocks of medicinal plants common in the Fergana Valley.

№	Types	Preparatory Part	Area (hectares)	Productivity kg / hectares	Raw materials (dry state), tons	
					total volume of raw materials	raw materials that can be prepared per year
1	<i>Rosa sp.sp</i>	fruit	350	250	87,50	29,16
2	<i>Berberis nummularia</i> Bunge	"	50	45	2,25	0,75
3	<i>Rhamnus catartica</i> L.	"	55	30	1,65	0,55
4	<i>Crataegus turkestanica</i> Pojark.	"	71	40	2,84	0,94
5	<i>Ephedra intermedia</i> Schrenk et C.A.Mey.	"	48	15	0,72	0,24
6	<i>Origanum tyttanthum</i> Gontsch.	the surface part of the ground	430	160	68,96	22,98
7	<i>Ziziphora pamiroalaica</i> Juz.	"	380	144	54,72	18,24
8	<i>Perovskija scrophulariifolia</i> Bunge	"	4550	465	2115,75	705,25
9	<i>Vinca erecta</i> Regel et Schmalh.	"	269	145	39,00	13,00
10	<i>Physochlaina alaca</i> E. Korot.	"	65	15	0,97	0,32



11	<i>Jnula macrophylla</i> Kar. Et Kir.	The	35	48	1,68	0,96
12	<i>Tussilaga farfara</i> L.	upper part of the root surface	18	130	2,34	0,78
13	<i>Plantago major</i> L.		45	83	3,73	1,24
14	<i>Artemisia absinthium</i> L.	"	31	1420	129,22	43,06
15	<i>A. dracunculis</i> L.	"	33	1513	49,92	16,64
16	<i>Melilotus officinalis</i> (L.) Pall.	"	33	2500	82,50	27,50
17	<i>Equisetum arvense</i> L.	"	26	35	0,91	0,30
18	<i>Scutellaria galericulata</i> L.	"	27	25	0,67	0,22
19	<i>Achillea millefolium</i> L.	"	28	38	1,06	0,35
20	<i>A. pilipendulina</i> Lam.	"	46	2100	36,60	32,20
21	<i>Gentiana oliveri</i> Griseb.	"	27	25	0,67	0,22
22	<i>Thalictrum isopyroides</i> C.A Mey	"	43	91	3,91	1,30
23	<i>Salvia selarea</i> L.	"	52	723	37,59	12,53
24	<i>Urtica dioica</i> L.	"	25	729	3,75	1,25
25	<i>Thymus seravschanica</i> Klok.	"	419	63	26,39	8,79
26	<i>Hypericum perforatum</i> L.	"	28	55	1,54	0,51
27	<i>Melissa officinalis</i> L.	"	32	48	1,53	0,51
28	<i>Polygonum hydropiper</i> L.	the surface part	40	125	5,0	1,66
29	<i>Capsella bursa-pastoris</i> (L.) Medik.	"	31	96	2,97	0,99
30	<i>Cerasus erythrocarpa</i> Nevski	fruit	158	79	12,48	4,16
31	<i>Hippophae rhamnoides</i> L.	"	15	19	0,28	0,09
32	<i>Adonis chrysocyathus</i> Hook. Fil. et Thoms	the surface part	550	215	118,25	39,45
33	<i>Rheum turkestanicum</i> Janisch.	"	49	310	15,15	5,06
34	<i>Delphinium biternatum</i> Huth	"	82	651	55,33	18,44
35	<i>Corydalis ledebouriana</i> Kar. et Kir.	"	219	81	17,73	5,91
36	<i>Polygala hybrid</i> DC.	"	520	82	42,64	14,21
37	<i>Impatiens parviflora</i> DC.	"	520	82	42,64	14,21
38	<i>Agrimonia asiatica</i> Juz.	"	351	318	111,61	37,20
39	<i>Glaucium fimbriigerum</i> (Traut.) Boiss.	"	79	312	24,64	8,21
40	<i>Trifolium repens</i> L.	the surface part	76	156	11,85	3,95
41	<i>T. pratense</i> L.	"	89	389	34,62	11,54
42	<i>Bunium persicum</i> (Boiss.) B. Fetsch.	"	18	8	0,144	0,05
43	<i>Poterium polygamum</i> Waldst. et Kit.	"	71	209	14,83	4,94
44	<i>Cichorium intybus</i> L.	"	89	167	14,86	4,95
45	<i>Tanacetum pseudachillea</i> C.Winkl.	"	93	312	29,01	9,67
46	<i>Taraxacum officinale</i> Wigg.	"	102	81	8,26	2,75
Total			10304	14139	3334	1110

DISCUSSION

In terms of area, after *P. scrophulariifolia*, *A. chrysocyathus* is in second place, with an area of 550 hectares. It ranks among the most important and valuable among our medicinal flora. The areas where *A. chrysocyathus* is distributed are 2,500 m and above sea level, i.e., a pasture zone. *Impatiens parviflora* DC in terms of area abundance. ranks

third, and its phytocenoses are 520 hectares. In the middle mountainous region of our region, ie at an altitude of 1800-2500 m above sea level, large areas are covered with junipers, broadleaf trees and shrubs. Their phytocenoses are found in mesophytic forests. *I. parviflora*, *Thymus seravschanica* Klokov, *Agrimonia astatra* L., *Polygala hybrid* DC, which are considered mesophytes in the cover of this and other



plants. etc., they are spread over an area of 300-400 ha. In relatively large areas there are several species of the Rosa genus, with an area of 350 ha. If we consider together the species *Origanum vulgare* L., *Zizifora* L. and *V. eresta* among the above species, the total area of the 10 most common species is 8137 hectares. They make up 78.97% of the total area.

Of the medicinal species, the area of *C. ledobouriana* is 219 hectares. The area of species such as *C. erythrocarpe* and *T. affinalis* is also much larger, i.e. 158 and 102 ha. In addition, we found that the area of more than 10 species, such as *R. catartica*, *C. turkestanica*, *P. polyganum*, ranged from 55 to 93. In addition, the area of many species is small, ranging from only 15 to 18 to 40 to 50 hectares. Such rare species include *B. vulgaris*, *E. foeminea*, *Inula grandis* Schrenk, *Erytroxylum coca var.ipadu*, *M. officinalis*, *Thalictrum*, *U. dioica*, *A. absinthium*, *A. millefolium*, *H. perforatum*, *Solvia* L. The areas of *H. rhamnoides*, *B. persicum* and *H. perforatum*, which are widely used in medicine and folk medicine, are very limited, their total area is small.

It should be noted that some species are so rare that their total area cannot be calculated. One such species is *Leonurus turkestanica* V.I.Krecz. & Kuprian., *Helichysum maracandicum* Popov ex Kirp., *Lagochilus paulsenii* Brig., *Rhodiola heterodontha* (Hook.fil. & Thomson) Boriss., *A. seravshanicum*, *Reseda luteola* L. and others.

In addition to determining the area of our medicinal species, it is important to determine their productivity, that is, the resources of raw materials. In analyzing them, the following became clear. As noted earlier, *P. scrophulariifolia* was found to have the highest index in area and biomass.

It turns out that 465 kg of biomass can be obtained from one hectare of distributed areas of *P. scrophulariifolia*. The total volume of raw materials is 2115 tons, of which 70 tons can be produced per year. Among our medicinal plants, white wormwood is also characterized by high yield, ie it is 1420 kg per hectare and an annual volume of 43 tons. Below are the following 10 species that are characterized by maximum productivity (Tab. 3).

Table 3
Natural reserves of common medicinal plants in the Fergana Valley.

No	Names of plants	Area (hectares)	General reserves (tons)
1	<i>Perovskija scrophulariifolëia</i>	465	2115
2	<i>Artemisia absinthium</i>	1420	129
3	<i>Adonis chrysocyathus</i>	215	118
4	<i>Agrimonia asiatica</i>	318	111
5	<i>Achilla filipendulina</i>	2100	96
6	<i>Rosa sp.sp.</i>	250	87
7	<i>Melilotus officinalis</i>	2500	82
8	<i>Origanum tyttanthum</i>	160	68
9	<i>Ziziphora pamiroalaica</i>	144	54
10	<i>Delphinium biternatum</i>	651	55
Total		8223 - 79,80%	2915 - 26,26%

As can be seen, these species are the most productive, occupying an area of 8223 hectares, which is 79.80% of the total area occupied by medicinal species. Their biological reserves are 2915 tons, which is 26.26% of the total.

Of course, the data on the habitats of plants and their natural resources, which are considered natural resources, cannot be said to be the same. Still, they represent real possibilities. These materials can serve as a practical application for state-owned enterprises and individuals who produce these medicinal plants. Based on this, long-term training plans can be developed.

CONCLUSIONS

In short, the Fergana Valley has great resources of medicinal plants. They can be used on an industrial scale (*P.scrophulariifolia*, *A. vernalis*, *A. absinthium*, *O. tyttanthum*, *Ziziphora*, *Rosa sp. Sp.*) And for limited local needs. It should be noted that the reserves of *H. perforatum*, *H. maracandicum*, *H. rhamnoides*, *A. seravshanicum*, *A. chrysocyathus*, *C. ussurensis* from some important and significant species have been greatly reduced. With this in mind, it is necessary to cultivate these species. So, all medicinal plants are an important component of our biosphere. should be protected as an important resource for the national economy and medicine.



They must serve many years now, both for our people and for future generations.

REFERENCES

1. Abubakirov N.K., Yamatova R.N. Study of glycosides of plants of the genus *Adonis L.* Glycosides of *Adonis chrysocyathus* Hook. f. et Th. - "Zhurn. General Chemistry", 1961, vol. 31, no. 7.
2. Hamidov G., Khalmatov A., Khakimov M. Resources of medicinal plants in the Fergana Valley and ways of their rational use and protection. In the book: Materials of the II International Conf. young. chemists, Namangan, 1998, part II.
3. Hamidov N., Mamudov V., Sagobiddinov R. Fargona vodiisining dorivor yosimliklari va ulardan samarali foydalanish. Teplam: Biology va ecology of Kozirgi zamon muammolari. Tashkent, 1995.
4. Jalalov A. Golden adonis and its biology. Abstract of thesis. diss. for a job. uch. Art. Ph.D. Tashkent, 1968.
5. Khakimov O. Biological bases of protection and possible ways of using Alai fizokhline. Abstract of thesis. diss. for a job. uch. Art. Ph.D. Tashkent, 1980.
6. Khalmatov Kh.Kh. Wild medicinal plants of Uzbekistan, Tashkent. 1964, 278 pp.
7. Khozhimatov K., Khozhimatov O.K. The main results and prospects of studying medicinal and essential oil plants in Uzbekistan. On Sat. Botany, ecology, yosimliklar muxofazasi (khalkaro ilmiy-amaliy conf. Materialari). Andijon, 2007.
8. Krylova I.A., Shreter A.I. Methodological knowledge and study of stocks of wild-growing medicines. rast. M. 1971.
9. Shreter A.I., Krylova I.L., Borisova N.A. Methodology for determining the reserves of raw materials for medicinal plants. M., 1986.
10. Taizhanov K. Alkaloid flora of mountainous Central Asia. Abstract of thesis. diss. for a job. uch. Art. Doctor of Biological Sciences Tashkent, 1994.
11. Yuldashev A.S. Zhanubiy Turkiston va Shimoliy Zarafshon tozlarining dorivor yosimliklari. Toshkent, 2001.
12. Yunusov S.Yu. Alkaloids. 3rd ed. Tashkent, 1981.



STUDENTS' PERCEPTION ON THE SELF-LEARNING MODULES IN DETERMINING THE ENGLISH PROFICIENCY OF GRADE 8 STUDENTS OF ADELINA I NATIONAL HIGH SCHOOL

Jhunisa Ann A. Merueña

ABSTRACT

Using the Descriptive –correlation research design, this study aimed to assess the students' perception on Self-Learning Module in determining the English proficiency of Grade 8 students of Adelina I National High School. Random sampling was used in this study to identify the number of Grade 8 respondents. Mean and standard deviation as well as Pearson's r correlation were used to treat the data. Findings revealed that the extent of students' perception on the use of self-learning module in determining their reading, speaking, and writing skills were all high. Moreover, the level of students' English Proficiency in reading gain satisfactory while very satisfactory performance was observed in writing and speaking skill. Also, the age, number of siblings, and educational attainment has no direct relationship to the students' perception on self-learning module in determining their English proficiency. While the gender and time spent in studying has a low to moderate relationship to the self-learning module in determining their English proficiency in terms of reading skill, speaking skill, and writing skill. Results further revealed that there is a significant relationship on the students' perception on self-learning module in determining the English proficiency of Grade 8 public junior high school students at 0.05 level of significance.

I. INTRODUCTION

Numerous countries all over the world have been affected by the COVID -19 pandemic which results to enormous impact on their life. One of the most affected branches is the Educational system.

In the Philippines, the education department through the help of other concerned agencies has already finalized a Department Order No. 8 series of 2020 known as "Learning Continuity Plan" to ensure that education will continue despite this kind of emergencies. Pursuant to this, the Department of Education (DepEd) will provide Self-Learning Modules (SLMs) for every subject in each grade level to be used by the distance learning students for this school year. A module is a short unit of instruction dealing with a single conceptual unit of subject matter. It is a self-contained and independent unit of instruction with the primary focus on a few well-defined objectives (Padmapriya, 2015 cited from Russell 1974).

The benefits of Self-Instructional Module are best described in terms of the type of learners for whom it is developed. Self-Instructional Modules can encourage students to develop their sense of responsibility on their learning. They have the freedom to learn without limitations. They retain more because they do the work themselves as compared to spoon feeding. Self-instructional module provides the opportunity to develop a good work ethic.

However, though the question on whether this new normal in education will become successful or not, the underlying problem on students' English proficiency even before the pandemic starts has been one of the major issues that the Philippine education sector has been facing. Proficiency of language is tested by measuring the ability of an individual's language use and communication skills in the learned language (Stephen et.al 2004). Peregoy and Boyle (2001: in Matin, 2011: p.236) states, "Listening, speaking, reading and writing occur naturally together in learning events in school at all great levels, even though traditionally they were taught separately." Equally, Harmer (2007) suggests that "One skill cannot be performed without another. It is impossible to speak in a conversation if



you do not listen as well, and people seldom write without reading.” For a comprehensive development of students’ English proficiency, those skills are equally important to be emphasized.

It is very evident that a person who knows how to read can educate themselves in any area of life they are interested in. When the learner has problem in reading, they also perform poorly in other subjects because they cannot read and understand the material and because learners do not always have the opportunity of face-to-face contact with their teachers due to this new normal in education, distance education students rely even more on their reading abilities. This calls for well-developed reading and study reading skills. An additional skill that must take into consideration is the students’ speaking skills. Determining this skill is crucial for modular distance learning where students do not always have the chance to have a face-to-face interaction with their teacher or if there is a chance, they only have limited time to do that. Another skill that must be develop under English proficiency is the writing skills of the students. Since most students are using the self-learning modules, they are expected to answer the tasks and activities on the modules thus enhancing their writing skills on sentence creation, observing correct grammar and other aspects. Instead of expressing their answers verbally, students put it into writing. Teachers comments on their work will serve as assessment tool whether students are enhancing their writing skills or still need more attention.

By looking at the data of the English proficiency of Filipino students, it is continually decreasing over the years based on their low performance in the national assessment in their competency in the use of the English language. Jadie et. al (2012) asserted that low proficiency in English language has been considered a barrier to learning and academic success at the post-secondary level and this is because English learners often lack the language proficiency necessary to understand the test content and academic work. Furthermore, Arsad, Bauniyamin, and Manan (2014) also affirmed that English language learners who have limited English language proficiency will have difficulty understanding the lessons or doing assignments in English.

English proficiency is associated with a substantial variety of factors, and it is indeed important to determine the learner’s English proficiency and academic competence even when they are using the self-learning modules in studying.

This present study assessed the students’ perception on the self-learning modules and how does it help in determining their English proficiency especially in this new normal in education where students spend most of their time studying at home.

II. METHODOLOGY

Participants

The respondents of the study are one hundred twenty-four (124) selected Grade 8 Public Junior High School students in Adelina I National High School. Questionnaire was used to assess the perception of students in using the self-learning module in determining their English proficiency. The respondents were asked to put a check mark to the column of their desired answer indicating the extent of their perception on the use of self-learning modules in determining their reading, speaking, and writing skills. Afterwards, they answered the reading test, writing test and undergone speaking test in the form of interview.

Instruments

After the measuring instrument has been retrieved, the researcher processed the raw data into quantitative forms. Data processing involves input, this involves the responses to the measuring instrument of the subjects of the study.

The frequency and percentage distribution were employed in the study for the profile of respondents after the data were coded, tabulated, and analyzed.

To assess the extent of students’ perception in using self-learning module in determining their English proficiency, mean and standard deviation was used. Also, the same treatment was used in determining the level of students English Proficiency in reading, speaking, and writing skills. The correlation between the students’ profile and English proficiency as well as relationship between students’ perception on self-learning module and English proficiency both used Pearson product-moment correlation treatment.



III. RESULTS AND DISCUSSIONS

A. Extent of Students' Perception in Self-Learning Module

The data showing the extent of students' perception in using the self-learning modules in enhancing the English proficiency were presented as follows.

Table 1. Extent of Students' Perception in the Self-learning Module in Reading Skill

Indicator	Mean	SD	Verbal Interpretation
1. It takes me a while before I understand the lesson on the module.	3.60	0.90	High Extent
2. I scan the text in the module before starting to read the whole lesson.	3.83	1.09	High Extent
3. I used dictionary when necessary.	3.81	1.02	High Extent
4. The module allowed me to understand the lesson effectively.	3.99	0.83	High Extent
5. The lessons and activities in the module help improve my English reading comprehension skills.	4.06	0.85	High Extent
Weighted Mean: SD	3.86: 0.96		
Verbal Interpretation	High Extent		

<i>Legend</i>	<i>Range</i>	<i>Verbal Interpretation</i>
5	4.21-5.00	Very High Extent
4	3.41-4.20	High Extent
3	2.61-3.40	Moderate Extent
2	1.81-2.60	Low Extent
1	1.00-1.80	Very Low Extent

It was gleaned from the data presented that the overall mean of (WM=3.86, SD =0.96) manifested that the extent of students' perception in the use of self-learning module in reading skills were *high*. The use of self-learning module was found important to determine the English comprehension skill of the students (M= 4.06, SD= 0.85) based on the lesson and activities. There is also a *high extent* of perception that the use of module allowed the students to understand the lesson effectively (M= 3.99, SD= 0.83). The students scan the text in the module before starting to read the whole lesson (M= 3.83, SD=1.09). They benefited from using dictionary when necessary to easily understand the lesson in the module (M= 3.81, SD= 1.02).

Lestrud (2013) states that reading skills lead a person to interact and gain meaning from written language. Hence, it is visible that the level of extent the students agreed based on their perception on the use of self-learning module in determining their reading skills were high. Furthermore, Whalon et. al (2009) suggests that one must master several components of reading and understand these different parts and how they work together which can help students lead to independently understand what the intended message is being relayed in the written context.

Table 2. Extent of Students' Perception in the Self-learning Module in Speaking Skills

Indicator	Mean	SD	Verbal Interpretation
1. I can easily answer open ended questions like "what if....?"	3.68	0.96	High Extent
2. I can easily share some of my thought in answering "why and how" questions.	3.80	0.87	High Extent
3. I can identify specific information on the module when asked.	3.36	0.78	Moderate Extent



4. I can express my answers using the English language.	3.34	0.97	Moderate Extent
5. I can easily answer “wh” questions when the teacher asked.	3.19	0.92	Moderate Extent
Weighted Mean: SD	3.47: 0.93		
Verbal Interpretation	High Extent		

<i>Legend</i>	<i>Range</i>	<i>Verbal Interpretation</i>
5	4.21-5.00	Very High Extent
4	3.41-4.20	High Extent
3	2.61-3.40	Moderate Extent
2	1.81-2.60	Low Extent
1	1.00-1.80	Very Low Extent

The extent of students’ perception on the use of self-learning module to share some of their thoughts in answering “why and how” questions were *high* ($M= 3.80, SD= 0.87$) based on the lesson and activities. The students also have *high extent* of perception that the use of module can easily let them answer open ended questions with ($M= 3.68, SD= 0.96$). On the other hand, the extent of students’ perception on identifying specific information on the module when asked with ($M= 3.36, SD=0.78$) were *moderate*. Also, the extent of students’ perception in expressing their answers in English were *moderate* ($M= 3.34, SD= 0.97$).

The weighted mean of 3.47 and with supported value of standard deviation 0.93 indicated that the extent of students’ perception on the use of self-learning module to determine their English proficiency skill in speaking were *high*.

Given the indicators used to assess the students’ perception on the use of self-learning module, the results support the claimed of McDonough and Shaw (2003) cited by Hui (2011) which states that speaking is not just an oral production of written language but rather involves learners in the mastery of wide range of sub-skills, which when added together, constitute an overall competence in the spoken language. Moreover, Nunan (1999) cited by Rahmawati & Ertin (2014) viewed that speaking requires someone to be linguistically competence in term of well articulating the sound, having sufficient vocabulary, and mastering structural or grammatical components.

Table 3. Extent of Students’ Perception in the Self-learning Module in Writing Skills

Indicator	Mean	SD	Verbal Interpretation
1. I could write the most important ideas from the lesson without any problems.	3.57	0.90	High Extent
2. I can easily create simple sentences using English Language.	3.57	0.92	High Extent
3. I can easily make an essay whenever our teacher asked us to do it.	3.31	0.97	Moderate Extent
4. I know how to use capitalization and correct punctuation when writing.	4.03	0.83	High Extent
5. I don’t find difficulty in applying correct grammar in writing.	3.42	0.87	High Extent
Weighted Mean: SD	3.58: 0.93		
Verbal Interpretation	High Extent		



<i>Legend</i>	<i>Range</i>	<i>Verbal Interpretation</i>
5	4.21-5.00	Very High Extent
4	3.41-4.20	High Extent
3	2.61-3.40	Moderate Extent
2	1.81-2.60	Low Extent
1	1.00-1.80	Very Low Extent

The use of self-learning module on knowing how to use capitalization and correct punctuation when writing have *high extent* of students' perception with ($M= 4.03, SD= 0.83$) based on the lesson and activities. There is also a high extent perception on whether the students could write the most important ideas from the lesson without any problems and can easily create simple sentences using English Language with ($M= 3.57, SD= 0.90, 0.92$). However, the extent of students' perception on making an essay whenever the teacher asked them to do with ($M= 3.31, SD=0.97$) were *moderate*.

The weighted mean of 3.58 and with supported value of standard deviation 0.93 indicated that the students' perception on the use of self-learning module in determining the English comprehension skill in writing is *high*.

According to Cole et.al 2015 when students are given opportunities to write for authentic meaning-making, message-sharing purposes, they can enjoy the benefits of writing even when they are beginning readers and writers who are doing so in a language they have not yet mastered with proper guide on factors to consider in assessing the writing skills.

B. Level of Student's English Proficiency

The table represent the level of students' English proficiency in terms of reading, speaking, and writing skills after answering the given questionnaire and engaging in an interview.

English Proficiency	Mean	SD	Remarks
Reading Skills	11.90	3.91	Satisfactory
Speaking Skills	12.99	3.79	Very Satisfactory
Writing Skills	15.10	3.65	Very Satisfactory

<i>Legend</i>	<i>Range</i>	<i>Verbal Interpretation</i>
5	16.01-20.00	Excellent (E)
4	12.01-16.00	Very Satisfactory (VS)
3	8.01-12.00	Satisfactory (S)
2	4.01-8.00	Fair (F)
1	0.00-4.00	Needs Improvement (NI)

Students gain *satisfactory* performance in reading skill ($M= 11.90, SD= 3.91$) while *very satisfactory* performance in writing ($M= 15.10, SD= 3.65$) and *very satisfactory* performance ($M= 12.99, SD= 3.79$) in speaking skill in the form of interview. They speak fluently with rare repetition, pronounce words correctly, have minor grammatical occurrence, and able to transmit ideas.

This implies that the used of self-learning module determined the English proficiency of the students. It collaborates with study by Dhamija (2014) and Padmapriya (2015) who both agreed that the use of self-learning modules was proved effective as they are free to learn at their own pace which boosts their confidence in their own learning.

C. Correlation Between Students' Profile and English Proficiency

The following data were presented to find out the relationship of students' profile on their English proficiency.



Demographic Profile	English Proficiency	r-value	p-value	Degree of Correlation	Analysis
Age	Reading Skills	0.029	0.751	Low Correlation	Not Significant
	Speaking Skills	0.099	0.272	Low Correlation	Not Significant
	Writing Skills	0.110	0.222	Low Correlation	Not Significant
Gender	Reading Skills	0.157	0.082	Low Correlation	Not Significant
	Speaking Skills	0.205	0.023	Low Correlation	Significant
	Writing Skills	0.218	0.015	Low Correlation	Significant
Number of Siblings	Reading Skills	-0.041	0.648	Low Correlation	Not Significant
	Speaking Skills	0.02	0.826	Low Correlation	Not Significant
	Writing Skills	-0.077	0.393	Low Correlation	Not Significant
Educational Attainment	Reading Skills	0.062	0.493	Low Correlation	Not Significant
		0.015	0.872	Low Correlation	Not Significant
	Speaking Skills	0.176	0.050	Low Correlation	Not Significant
		0.126	0.164	Low Correlation	Not Significant
	Writing Skills	0.296	0.001	Low Correlation	Significant
		0.150	0.096	Low Correlation	Not Significant
Time Spent	Reading Skills	-0.109	0.230	Low Correlation	Not Significant
	Speaking Skills	-0.302	0.001	Moderate Correlation	Significant
	Writing Skills	-0.0370	0.000	Moderate Correlation	Significant

Legend

Range	Degree of Correlation
± 1	Perfect Correlation
$\pm .50 - \pm .99$	High Correlation
$\pm .30 - \pm .49$	Moderate Correlation
$\pm 0.01 - \pm .29$	Low Correlation
0	No Correlation

Result showed that positive and low correlation were established between the students' profile in terms of age and English proficiency ($r = 0.029$, $p = 0.751$) reading skill ($r = 0.099$, $p = 0.272$) speaking skill and ($r = 0.110$, $p = 0.222$) writing skill. The revealing result on the correlation between age and English proficiency of students were *not significant*.

Based on students' profile in terms of gender and English proficiency it showed positive and low correlation ($r = 0.157$, $p = 0.082$) reading skill ($r = 0.205$, $p = 0.023$) speaking skill and ($r = 0.218$, $p = 0.015$) writing skills. However, it is also noted that correlation between students' profile in terms of gender and English proficiency in speaking and writing skills were *significant*.

The number of respondents siblings and its relation to English proficiency have negative and low correlation in reading skills ($r = -0.041$, $p = 0.648$) and writing skills ($r = -0.077$, $p = 0.393$) but have positive with low correlation in speaking skills ($r = 0.02$, $p = 0.826$). The results showed *no significant* relationship between the two correlations.



The result between students' parents educational background and English proficiency has positive and low correlation. Only the Writing skills of students and their parents educational background have a *significant* relationship.

There is a negative and moderate correlation between students' time spent in studying and English Proficiency in terms of speaking skills ($r = -0.302$, $p = 0.001$) and writing skills ($r = -0.0370$, $p = 0.000$). The correlation is *significant*. However, in terms of reading skills, it has negative and low correlation with ($r = 0.109$, $p = 0.230$) and have no significant correlation.

The age, number of siblings, and parents' educational attainment has no direct relationship to the students' perception on self-learning module in determining their English proficiency in terms of *reading skill, speaking skill* and *writing skill*.

While the gender and time spent in studying has a low to moderate relationship to the self-learning module in determining their English proficiency in terms of *reading skill, speaking skill, and writing skill*.

Some of the results supports the study of Solis et.al 2013 which states that the age and parents' educational attainment of the respondents has no significant relationship on students' English proficiency. And that gender was considered statistically significant. This result proves that gender is a determinant to the English Proficiency level of the respondents.

D. Relationship Between Students' Perception on Self-learning Module and English Proficiency

Perception on Self-learning Module	English Proficiency	r-value	p-value	Degree of Correlation	Analysis
	Reading Skills	0.260	0.004	Low Correlation	Significant
	Speaking Skills	0.454	0.000	Moderate Correlation	Significant
	Writing Skills	0.282	0.002	Low Correlation	Significant

Legend

Range	Degree of Correlation
± 1	Perfect Correlation
$\pm .50 - \pm .99$	High Correlation
$\pm .30 - \pm .49$	Moderate Correlation
$\pm 0.01 - \pm .29$	Low Correlation
0	No Correlation

The result showed that positive, low to moderate correlation were established between the students' perception on self-learning module and English proficiency ($r = 0.260$, $p = 0.004$) reading skill, ($r = 0.282$, $p = 0.002$) writing skill, ($r = 0.454$, $p = 0.000$) speaking skill.

Based on the data, it is shown that there is "a significant relationship on the students' perception on self-learning module in determining the English proficiency of Grade 8 public junior high school students in Adelina I National High School" at 0.05 level of significance. The null hypothesis stating that "There is no significant relationship on the students' perception on self-learning module in determining the English proficiency of Grade 8 public junior high school students in Adelina I National High School." is rejected.

It can be inferred that by using self-learning module, it can determine the students' English proficiency skills because students retained the concepts in English in a better way when they were taught through Self-Learning Modules in comparison to conventional teaching. Also, it supports the claimed of Padmapriya (2015) which states that module motivates the students to regulate and manage their own learning styles, and thereby create an interest and attitude among the students as they are free to learn at their own pace which boosts their confidence in their own learning (Padmapriya, 2015).



IV. CONCLUSIONS

Based on the findings, the study concludes that students' have a *high extent* of perception on the use of self-learning module in determining their English Proficiency.

It can also be concluded that the level of students' English Proficiency in reading skills gained *satisfactory* rating while *very satisfactory* level in speaking and writing skills.

Although the study further concludes that not all the investigated factors show a correlation between respondents' profile and English proficiency--two factors, gender and time spent in studying turn out to be significantly related to the students' English proficiency.

The results reject the null hypothesis, which formerly states that there is no significant relationship on the students' perception in Self-Learning module on the determining students' English proficiency. There is a notable *significant relationship* between them.

V. RECOMMENDATIONS

Considering the findings and conclusions of the study, several recommendations were offered. Since it was shown in the findings that gender and time spent in studying are factors correlating with the English proficiency of an individual, it is important that parents should monitor the status of their sons and daughters when it comes to their performance in English, and that they should encourage them to spend more time in studying English. The school administrators and staffs might can be further used Self-learning modules in determining the English proficiency of students. Further study to dig deeper on other factors that might affect the English proficiency of students may be made. It will also be recommended to use the self-learning modules to determine the students' English proficiency even when there are face-to-face classes already. Moreover, future researchers may use this as their reference when doing another research work about students' English proficiency. Lastly, other research enthusiasts are encouraged to conduct a similar study on a wider scope to validate the results and findings of the present study. Likewise, further studies may be conducted to make an improvement or add more factors that may contribute to determine the English proficiency of students.

REFERENCES

1. Arsad P., Bauniyamin, N., & Manan, B. (2014). *Students' English language proficiency and its impact on the overall students' academic performance: An analysis and prediction using Neural Network Model*. WSEAS Transactions on Advances in Engineering Education, 5, 44-53. doi:10.12738/estp.2016.6.0052
2. Cole, J., & Feng, J. (2015). *Effective Strategies for Improving Writing Skills of Elementary English Language Learners*. Chinese American Educational Research and Development Association Annual Conference. Chicago.
3. Damija, N. (2014). *Effectiveness of Self-Learning Modules on the Achievement of Elementary School Students in the Acquisition of Concepts in English Grammar*.
4. Harmer, Jeremy (2007) *The Practice of English Language Teaching*. 4th ed. London: Longman.
5. Hui, L. (2011). *Improving Students' English-Speaking Skill through Content-Based Instruction*. Retrieved from: <https://core.ac.uk/download/pdf/>
6. Jadie, K., Sonya, P., Laura, S., Natasha, W. (2012). *Connecting English language learning and academic performance: A predictive study*. American Educational Research Association, Vancouver, British Columbia, Canada. 1-17.
7. Lestrud M. (2013). *Reading Skills*. In: Volkmar F.R. (eds) *Encyclopedia of Autism Spectrum Disorders*. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1698-3_1579
8. Padmapriya P. V. (2015). *Effectiveness of Self Learning Modules on Achievement in Biology Among Secondary School Students*. International Journal of Education and Psychological Research (IJEPR). Volume 4, Issue 2.
9. Peregoy, Suzanne, & Owen Boyle. *Reading, Writing & Learning in ESL*. 4th ed. New York: Longman, 2001.
10. Rahmawati, Y. & Ertin, E. (2014). *Developing assessment for speaking*. IJEE (Indonesian Journal of English Education) I Vol. 1 I No. 2 I 2014. Retrieved from: <http://journal.uinjkt.ac.id/index.php/ijee/article/view/1345>
11. Stephen, D. F., Welman, J. C., & An, W. J. J. (2004). *English language proficiency an indicator of academic performance at a tertiary institution*, Journal of Human Resource Management, 2(3), 42-53.
12. Solis, et. al (2013). *Factors Associated with the English Proficiency of Elementary pupils at Central Philippine University*. Retrieved from: https://www.academia.edu/8761470/Factors_Affecting_the_English_Proficiency_of_the_Elementary_Pupils_at_Central_Philippine_University
13. https://www.academia.edu/8761470/Factors_Affecting_the_English_Proficiency_of_the_Elementary_Pupils_at_Central_Philippine_University
14. Whalon, K., & Hart, J. E. (2011). *Adapting an evidence-based reading comprehension strategy for learners with autism spectrum disorder*. Intervention in School and Clinic, 46(4), 195-203.